# **TOSHIBA** Leading Innovation >>>

# Integrated High Definition LED Television User's Guide:

32L1460UC 40L1460UC 50L1460UC

If you need assistance:

Toshiba's Support Web site www.toshiba.ca/support/ceg

For more information, see "Troubleshooting" on page 95 in this guide.

#### **Owner's Record**

The model number and serial number are on the back and side of your TV.

Record these numbers in the spaces below. Refer to these numbers whenever you communicate with your Toshiba dealer about this TV Model number:

Model number:

Serial number:

Note: To display a High Definition picture, the TV must be receiving a High Definition signal (such as an over-the-air High Definition TV broadcast, a High Definition digital cable program, or a High Definition digital satellite program). For details, contact your TV antenna installer, cable provider, or satellite provider

#### Dear Customer,

Thank you for purchasing this Toshiba LED TV. This document will help you use the many exciting features of your new LED TV. Before operating your LED TV, carefully read this document completely.

#### Safety Precautions warning: to reduce the risk of fire or electric shock, do not expose this appliance to rain or moisture.



WARNING: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

## WARNING

Improper location and installation of a television can lead to the death of your child. Never place the television on furniture or in a location where children can climb up on and tip over the television. Please refer to the Child Safety information in item 26) on page 5 of the Important Safety Instructions/Installation section.

WARNING: If you decide to wall mount this television, always use a mounting bracket that has been Listed by an independent laboratory (such as UL, CSA, ETL) and is appropriate for the size and weight of this television. The use of inappropriate or non-Listed mounting brackets could result in serious bodily injury and/or property damage. See "To Display your LED TV on the included Pedestal Stand." on page 6

## **NOTE TO CATV INSTALLERS**

This is a reminder to call the CATV system installer's attention to Article 820-40 of the U.S. NEC, which provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical. For additional antenna grounding information, see 33) on page 5 and 34) on page 5.

# CHILD SAFETY: PROPER TELEVISION PLACEMENT MATTERS





• Manufacturers, retailers and the rest of the consumer electronics industry are committed to making home entertainment safe and enjoyable.

 As you enjoy your television, please note that all televisions – new and old- must be supported on proper stands or installed according to the manufacturer's recommendations. Televisions that are inappropriately situated on dressers, bookcases, shelves, desks, speakers, chests, carts, etc., may fall over, resulting in injury.

# TUNE IN TO SAFETY

- ALWAYS follow the manufacturer's recommendations for the safe installation of your television. • ALWAYS read and follow all instructions for proper use of your television.
- NEVER allow children to climb on or play on the television or the furniture on which the television is placed.
- NEVER place the television on furniture that can easily be used as steps, such as a chest of drawers.
- ALWAYS install the television where it cannot be pushed, pulled over or knocked down.
- ALWAYS route cords and cables connected to the television so that they cannot be tripped over, pulled or grabbed.

#### WALL OR CEILING MOUNT YOUR TELEVISION

• ALWAYS contact your retailer about professional installation if you have any doubts about your ability to safely mount your television.

• ALWAYS use a mount that has been recommended by the television manufacturer and has a safety certification by an independent laboratory (such as UL, CSA, ETL).

- ALWAYS follow all instructions supplied by the television and mount manufacturers.
- ALWAYS make sure that the wall or ceiling where you are mounting the television is appropriate.
   Some mounts are not designed to be mounted to walls and ceilings with steel studs or cinder block construction. If you are unsure, contact a professional installer.

-Televisions can be heavy. A minimum of two people is required for a wall or ceiling mount installation.



# MOVING AN OLDER TELEVISION TO A NEW PLACE IN YOUR HOME

 Many new television buyers move their older CRT televisions into a secondary room after the purchase of a flat-panel television. Special care should be made in the placement of older CRT televisions.

• ALWAYS place your older CRT television on furniture that is sturdy and appropriate for its size and weight.

• NEVER place your older CRT television on a dresser where children may be tempted to use the drawers to climb.

• ALWAYS make sure your older CRT television does not hang over the edge of your furniture.







#### Important Safety Instructions

- 1) Read these instructions.
- 2) Keep these instructions.
- 3) Heed all warnings.
- 4) Follow all instructions.
- 5) Do not use this apparatus near water.
- 6) Clean only with dry cloth.
- 7) Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- 8) Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- 9) Do not defeat the safety purpose of the polarized or grounding type plug. A polarized plug has two blades with one wider than the 1h other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- Protect the power cord from being walked on or pinched, particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- 11) Only use attachments/accessories specified by the manufacturer.
- 12) Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/ apparatus combination to avoid injury from tip-over.



- Unplug this apparatus during lightning storms or when unused for long periods of time.
- 14) Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as when power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

## **Additional Safety Precautions**

- 14a) **CAUTION:** If the TV is dropped and the cabinet or enclosure surface has been damaged or the TV does not operate normally, take the following precautions:
  - ALWAYS turn off the TV and unplug the power cord to avoid possible electric shock or fire.
  - NEVER allow your body to come in contact with any broken glass or liquid from the damaged television. The LCD panel inside the TV contains glass and a toxic liquid. If the liquid comes in contact with your mouth or eyes, or your skin is cut by broken glass, rinse the affected area thoroughly with water and contact your doctor immediately.

ALWAYS contact a service technician to inspect the TV any time it has been damaged or dropped.

#### 15) CAUTION:

- · To reduce the risk of electric shock, do not use the polarized plug with an extension cord, receptacle, or other outlet unless the blades can be inserted completely to prevent blade exposure.
- To prevent electric shock, match wide blade of plug to wide slot; fully insert.

#### 16) CAUTION:

 Do not let children swallow any small parts included on or with the product or play with the plastic bag. Keep the small parts and the plastic bag out of the reach of children.

#### 17) CAUTION:

 Do not let water or other liquids come into contact with the product, as it may result in damage.

#### 18) WARNING:

- · To prevent the spread of fire, keep candles or other open flames away from this product at all times.
- Keep the product away from direct sunlight, fire or a heat source such as a heater. This may reduce the product life time or result in fire.

## Installation, Care, and Service

#### Installation

Follow these recommendations and precautions and heed all warnings when installing your TV:



WARNING: Never expose the batteries to excessive heat such as sunshine, fire. or the like.

- 20) ALWAYS plug the product into an outlet that is located in such a manner that it can be easily unplugged in case the product requires service.
- 21) NEVER route the product's power cord inside a wall or similar enclosed area.
- 22) Never modify this equipment. Changes or modifications may void: a) the warranty, and b) the user's authority to operate this equipment under the rules of the Federal Communications Commission.



DANGER: RISK OF SERIOUS PERSONAL INJURY, DEATH, OR EQUIPMENT DAMAGE!

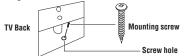


Never place the TV on an unstable cart, stand, or table. The TV may fall, causing serious personal injury, death, or serious damage to the TV. 24) When selecting a location for the TV,

- NEVER allow any part of the TV to hang over the edge of the supporting furniture,
- NEVER place the TV on tall furniture (for example, entertainment centers or bookcases) without anchoring both the furniture and the TV to a suitable support,
- Never place cloth or other material between the TV and the supporting furniture.
- · NEVER allow children to climb on the TV
- 25) To avoid damage to this product, never place or store the TV in direct sunlight; hot, humid areas; or areas subject to excessive dust or vibration.
- 26) Always place the TV on the floor or a sturdy, level, stable surface that can support the weight of the unit. Secure the TV using one of the following methods: (1) Secure the TV with a mounting screw (Recommended).

 Place the TV on a sturdy surface that has a sufficient thickness and screw the unit on the surface securely by using the mounting screw and the fall-prevention screw hole.

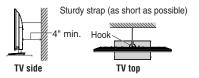
• If secured to furniture or other movable objects, the furniture must be secured to an immovable structure using the method shown in item 2 below.



(2) Secure the TV with a sturdy strap to a wall stud, pillar, or other immovable structure. When connecting the strap:

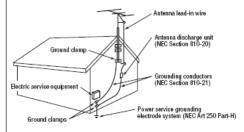
- attach the strap to the TV using the hooks on the back of the TV, the clips on the pedestal, or the hole in the base of the pedestal as available.

- make sure the strap is tight, secure, and parallel to the floor.



- 27) The product shall not be exposed to dripping or splashing, and that no objects filled with liquids, such as vases, shall be placed on the apparatus.
- 28) Never block or cover the slots or openings in the TV cabinet back, bottom, and sides. Never place the TV:
  - on a bed, sofa, rug, or similar surface;
  - too close to drapes, curtains, or walls; or
  - in a confined space such as a bookcase, built-in cabinet, or any other place with poor ventilation.

- 29) Always leave a space of at least 4 (four) inches around the TV. The slots and openings are provided to protect the TV from overheating and to help maintain reliable operation of the TV.
- 30) Never allow anything to rest on or roll over the power cord, and never place the TV where the power cord is subject to wear or abuse.
- 31) Never overload wall outlets and extension cords.
- 32) Always operate this equipment from a 120V AC, 60 Hz power source.
- 33) Always make sure the antenna system is properly grounded to provide adequate protection against voltage surges and built-up static charges (see Section 810 of the National Electric Code).



34)

#### DANGER: RISK OF SERIOUS PERSONAL INJURY OR DEATH!

- When installing a rooftop antenna, use extreme care to make sure you are never in a position where your body (or any item you are in contact with, such as a ladder or screwdriver) can accidentally touch overhead power lines. Never locate the antenna near overhead power lines or other electrical circuits.
- Never attempt to install any of the following during lightning activity: a) an antenna system; or b) cables, wires, or any home theater component connected to an antenna or phone system.

#### Care

For better performance and safer operation of your TOSHIBA TV, follow these recommendations and precautions:

35) If you use the TV in a room where the temperature is 32° F (0° C) or below, the picture brightness may vary until the LED warms up. This is not a sign of malfunction.



#### WARNING: RISK OF SERIOUS PERSONAL INJURY OR EQUIPMENT DAMAGE!

• Never use chemicals (such as air fresheners, cleaning agents, etc.) on or near the TV pedestal.

Studies indicate that plastics may weaken and crack over time from the combined effects of chemical agents and mechanical stress (such as the weight of the TV). Failure to follow these instructions could result in serious injury and/or permanent damage to TV and TV pedestal.

- Always unplug the TV before cleaning. Gently wipe the display panel surface (the TV screen) using a dry, soft cloth (cotton, flannel, etc.). A hard cloth may damage the surface of the panel. Avoid contact with alcohol, thinner, benzene, acidic or alkaline solvent cleaners, abrasive cleaners, or chemical cloths, which may damage the surface. Never spray volatile compounds such as insecticide on the cabinet. Such products may damage or discolor the cabinet.
- 37) Never hit, press, or place anything on the back cover. These actions will damage internal parts.
- 38) WARNING: Never spill liquids or push objects of any kind into the TV cabinet slots.
- 39) During a lightning storm, do not touch the connecting cables or product.
- 40) For added protection of your TV from lightning and power surges, always unplug the power cord and disconnect the antenna from the TV if you leave the TV unattended or unused for long periods of time.
- 41) Always unplug the TV to completely disconnect from mains power. When the TV is turned off using the on/ off switch, it is not completely disconnected from power and a minute amount of current is still consumed.
- 42) During normal use, the TV may make occasional snapping or popping sounds. This is normal, especially when the unit is being turned on or off. If these sounds become frequent or continuous, unplug the power cord and contact a Toshiba Authorized Service Provider.
- 43) WA

#### WARNING: RISK OF SERIOUS PERSONAL INJURY OR EQUIPMENT DAMAGE!

Never strike the screen with a sharp or heavy object.

- 44)
- The LCD screen of this product can be damaged by ultraviolet radiation from the sun. When selecting a location for the television, avoid locations where the screen may be exposed to direct sunlight, such as in front of a window.
- Never touch, press, or place anything on the LCD screen. These actions will damage the LCD screen. If you need to clean the LCD screen, follow the instructions in item 36) on page 5.

#### Service

45)



and removing the covers may expose you to dangerous voltage or other hazards. Failure to follow this WARNING may result in death or serious injury. Refer all servicing not specified in this manual to a Toshiba Authorized Service Provider.

- 46) If you have the TV serviced:
  - Ask the service technician to use only replacement parts specified by the manufacturer.
  - Upon completion of service, ask the service technician to perform routine safety checks to determine that the TV is in safe operating condition.

# Choosing a location for your LED TV

#### To Display your LED TV on the included Pedestal Stand:

Observe the following safety precautions:

1) Read and follow the pedestal assembly instructions included with the pedestal.

**CAUTION:** Before beginning pedestal assembly, carefully lay the front of the LCD Panel face down on a flat, cushioned surface such as a quilt or blanket. Leave the bottom of the unit protruding over the edge of the surface and assemble the pedestal as described in this instruction document. **Note:** Extreme care should always be used when attaching the pedestal stand to avoid damage to the LCD panel.

- Place the TV on a sturdy, level surface that can support the weight of the TV.
- Be sure to secure the TV to a wall, pillar, surface, or other immovable structure see item 26) on page 5 for additional details.

#### To Display your LED TV using a Wall Bracket:

If you decide to wall mount your LED TV, always use a wall bracket Listed by an independent laboratory (such as UL, CSA, ETL) that is appropriate for the size and weight of the TV:

- 1) **CAUTION:** Two people are required for installation.
- Unplug and remove any cables and/or other component connectors from the rear of the TV.
- 3) Remove the screws of the VESA Mounting Pattern shown in the table below, if applicable.

**CAUTION:** Do not use the screws removed from the back cover to attach the wall mount bracket to the TV.

- Always use the screws supplied or recommended by the wall mount manufacturer.
- 5) Follow the instructions provided with your wall bracket. Before proceeding, make sure the appropriate bracket(s) are attached to the wall and the back of the TV as described in the instructions provided with the wall bracket.
- After attaching the appropriate bracket(s) to the wall and the back of the TV, remove the pedestal stand from the TV, as described in this instruction document.

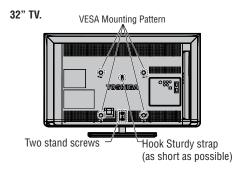
Never attempt to service the TV yourself. Opening

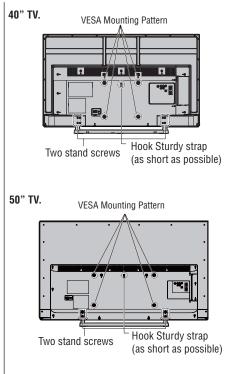
#### 7) VESA Mounting Pattern

TV Size	Hole Pattern (HxV)	Screw Size
32"	200mm x 200mm	M6
40"	200mm x 200mm	M6
50"	400mm x 200mm	M8

#### **Removing the Pedestal Stand**

- Carefully lay the front of the unit face down on a flat, cushioned surface such as a quilt or blanket. Leave the stand protruding over the edge of the surface. *Note:* Extreme care should always be used when removing the pedestal stand to avoid damage to the LCD panel.
- 2) Remove the stand screws shown in the diagram below. This will allow removal of the pedestal stand.
- Once you have removed the screws holding the pedestal stand in place, remove the pedestal stand from the TV.





**CAUTION:** Always place the TV on the floor or a sturdy, level, stable surface that can support the weight of the unit. To secure the TV, use a sturdy strap from the hook(s) on the rear of the TV to a wall stud, pillar, or other immovable structure. Make sure the strap is tight, secure, and parallel to the floor.

## Canada - Industry Canada Statement

Operation is subject to the following two conditions:

(1) This device may not cause harmful interference received, and

(2) This device must accept any interference received, including interference that may cause undesired operation of the device.

This device and its antenna(s) must not be co-located or operating in conjunction with any other antenna or transmitter.

# ENERGY STAR® User Information

ENERGY STAR User Information Statement: the factory default settings of this television meet ENERGY STAR<sup>®</sup> requirements. Changing Picture Settings may increase energy consumption, possibly beyond the limits required for ENERGY STAR qualification.

To ensure your television is operating at optimal energy efficiency, select [Home] mode during initial activation. To return to [Home] mode settings, select the [Installation] icon from the menu, select [Store / Home Mode], then select [Home]. This places the TV in [Standard] mode. [Standard] mode is recommended for normal home use.



ENERGY STAR\* qualified TV. Products that earn the ENERGY STAR prevent green house gas emissions by meeting strict guidelines set by the U.S. Environmental Protection Agency. ENERGY STAR and the ENERGY STAR mark are registered U.S. marks.

# Important notes about your TV

The following symptoms are technical limitations of LCD Display technology and are not an indication of malfunction; therefore, Toshiba is not responsible for perceived issues resulting from these symptoms.

- An afterimage (ghost) may appear on the screen if a fixed, non-moving image appears for a long period of time. The afterimage is not permanent and will disappear in a short period of time.
- 2) The LCD panel contained in this TV is manufactured using an extremely high level of precision technology; however, there may be an occasional pixel (dot of light) that does not operate properly (does not light, remains constantly lit, etc.). This is a structural property of LCD technology, is not a sign of malfunction, and is not covered under your warranty. Such pixels are not visible when the picture is viewed from a normal viewing distance.

**Note:** Interactive video games that involve shooting a "gun" type of joystick at an on-screen target may not work with this TV.

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# Contents

Chapter 1: Introduction Features Overview of installation, setup, and use TV front and side panel controls and connections TV back panel connections	17 18 19
Chapter 2: Connecting Your TV	. 23
Overview of cable types	
Coaxial (F-type) cable	
Standard A/V cables (red/white/yellow)	
Component video cables (red/green/blue)	
HDMI <sup>®</sup> cable (with HDMI Logo)	
Optical audio cable	
About the connection illustrations	
Connecting a VCR, antenna, cable TV,	
or camcorder	25
Connecting a Blu-ray <sup>™</sup> / DVD player, satellite	-
receiver with ColorStream <sup>™</sup> or VCR	27

	Connecting an HDMI <sup>®</sup> or DVI device to the HDMI <sup>®</sup> input	
	HDMI <sup>®</sup> CEC connection	30
	Connecting a digital audio system	32
	Connecting a computer	
	Connection to the TV's HDMI® terminal	33
Chapter 3:	Using the Remote Control	35
1	Installing batteries	
	Remote control effective range	
	Learning about the remote control	
Chapter 4:	Menu Layout and Navigation	
	Main menu layout	
	Navigating the menu system	
Chapter 5:	Setting up your TV	44
	Initial Setup	
	Installation setup selection	
	Storing channels in memory (optional)	
	Auto Tuning	
	Manual Tuning	
	Setting channel skip	
	Setting the AV input mode	
	Setting the time zone	
	Viewing the system status	
	Resetting Factory Defaults	
Chapter 6 <sup>.</sup>	Setting up your TV	51
	Selecting the video input source	
	Labeling the video input sources	
	Tuning channels using the Channel Browser	
	Favorites browser	
	Elements of the Channel Browser	
	Adding and clearing channels and inputs	
	in the History List	58
	<b>,</b> -	

Tuning to the next programmed channel58
Tuning to a specific channel (programmed or
unprogrammed)58
Switching between two channels using
Channel Return59
Switching between two channels using
SurfLock™59
Selecting the picture size60
Full61
TheaterWide 161
TheaterWide 261
TheaterWide 362
Native62
4:363
Normal63
Dot by Dot63
Scrolling the TheaterWide™ picture
(TheaterWide 2 and 3 only)64
Using the Auto Aspect feature64
Using the 4:3 Stretch65
Using the FREEZE feature65
Adjusting the picture66
Selecting the picture mode66
Adjusting the picture quality67
Using closed captions68
Base closed captions68
Digital CC settings69
Adjusting the audio70
Muting the sound70
Using the Digital Audio Selection71
Selecting stereo/SAP broadcasts71
Adjusting the audio quality72
DTS TruSurround <sup>™</sup> 73
Sound Mode73
Stable Sound <sup>™</sup> 73

Using the Dolby <sup>®</sup> Digital Dynamic Range	70
Control feature Sound Bar Connection	-
Selecting the PIN code	
Enter a new PIN code	
Forgotten PIN code	
Changing or deleting your PIN code	
Using the input lock feature	
Locking channels	
Using the GameTimer™	75
Using the panel lock feature	
Using the Media Player	
Auto Start function	
To open the Media Player	
Viewing photo files	
Playing music files	
Viewing photo files and playing music files	
at the same time	82
Sorting photo or music files	
Setting the sleep timer	
No Signal Power Down	
Using HDMI <sup>®</sup> CEC	
HDMI <sup>®</sup> CEC playback device (Blu-ray™/DVD	
player, etc.) control	85
Other HDMI® CEC functions	87
Setting up HDMI® CEC	87
Using the HDMI® settings feature	88
HDMI® 1(or 2) RGB Range	88
HDMI <sup>®</sup> Information Display	88
Displaying TV status information	89
Understanding the last mode memory feature	90
Chapter 7: Using the TV's Advanced Features	91
Using the advanced picture settings	91
ColorMaster <sup>™</sup>	
Base Color Adjustment	91

Static Gamma		Static Gamma	00
Dynamic Contrast Cinema Mode Noise Reduction Chapter 8: Troubleshooting General troubleshooting Picture problems Sound problems Remote control problems Channel tuning problems Closed caption problems No HDMI® CEC operation HDMI® problems Media Player problems Media Player problems 10 f the problem persists after trying the solutions 11 Appendix A: Specifications 10 Channel coverage 10 Power maximum current			
Cinema Mode			
Noise Reduction         Chapter 8: Troubleshooting         General troubleshooting         Picture problems         Sound problems         Remote control problems         Channel tuning problems         Closed caption problems         No HDMI® CEC operation         HDMI® problems         Media Player problems         Media Player problems         If the problem persists after trying the solutions         10         Television system         11         Power source         11         Power maximum current		5	
Chapter 8: Troubleshooting			
General troubleshooting Picture problems Sound problems Remote control problems Channel tuning problems Closed caption problems No HDMI® CEC operation HDMI® problems Media Player problems Media Player problems If the problem persists after trying the solutions1 Appendix A: Specifications		Noise Reduction	93
Picture problems Sound problems Remote control problems Channel tuning problems Closed caption problems No HDMI® CEC operation HDMI® problems Media Player problems Media Player problems If the problem persists after trying the solutions If the problem persists after trying the solutions Television system Channel coverage Power source Power maximum current	Chapter 8:	Troubleshooting	95
Sound problems Remote control problems Channel tuning problems Closed caption problems No HDMI® CEC operation HDMI® problems Media Player problems If the problem persists after trying the solutions If the problem persists after trying the solutions Channel coverage		General troubleshooting	95
Remote control problems Channel tuning problems Closed caption problems No HDMI® CEC operation HDMI® problems Media Player problems If the problem persists after trying the solutions If the problem persists after trying the solutions Television system Channel coverage Power source		Picture problems	96
Channel tuning problems Closed caption problems No HDMI® CEC operation HDMI® problems Media Player problems If the problem persists after trying the solutions1 Appendix A: Specifications Television system Channel coverage Power source Power maximum current		Sound problems	97
Closed caption problems No HDMI® CEC operation HDMI® problems Media Player problems If the problem persists after trying the solutions If the persists after trying the persists after trying the persists after trying the persists after trying the persists after		Remote control problems	98
No HDMI® CEC operation HDMI® problems		Channel tuning problems	98
HDMI® problems Media Player problems If the problem persists after trying the solutions1 Appendix A: Specifications Television system Channel coverage Power source Power maximum current		Closed caption problems	99
Media Player problems		No HDMI <sup>®</sup> CEC operation	99
If the problem persists after trying the solutions1 Appendix A: Specifications		HDMI® problems	99
Appendix A: Specifications		Media Player problems	100
Television system1 Channel coverage1 Power source1 Power maximum current1		If the problem persists after trying the solutions	100
Television system1 Channel coverage1 Power source1 Power maximum current1	Appendix A	: Specifications	. 101
Channel coverage1 Power source1 Power maximum current1			
Power maximum current1		Channel coverage	101
		Power source	102
		Power maximum current	102
Power consumption1		Power consumption	102
Audio power1		Audio power	102
Speaker type1		Speaker type	102
Video/audio terminals1		Video/audio terminals	102
Video/audio input 1		Video/audio input	102
		ColorStream™ (component video) HD input	103
ColorStream <sup>™</sup> (component video) HD input1			
ColorStream <sup>™</sup> (component video) HD input1 HDMI® input1		Dimensions (with stand)	103
ColorStream <sup>™</sup> (component video) HD input1		Weight (mass)	103
ColorStream <sup>™</sup> (component video) HD input1 HDMI <sup>®</sup> input1 Dimensions (with stand)1 Weight (mass)1		Operating conditions	103
ColorStream <sup>™</sup> (component video) HD input1 HDMI <sup>®</sup> input1 Dimensions (with stand)1			
ColorStream <sup>™</sup> (component video) HD input1 HDMI <sup>®</sup> input1 Dimensions (with stand)1 Weight (mass)1 Operating conditions1 Supplied accessories1		Acceptable signal formats for HDMI <sup>®</sup>	10/

# Contents 15

HDMI <sup>®</sup> signal format	s104
Appendix B: Index	

# **Chapter 1**

# Introduction

# **Safety icons**

This manual contains safety instructions that must be observed to avoid potential hazards that could result in personal injuries, damage to your equipment, or loss of data. These safety cautions have been classified according to the seriousness of the risk, and icons highlight these instructions as follows:

A DANGER	Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.
AWARNING	Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.
ACAUTION	Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.
CAUTION	Indicates a potentially hazardous situation which, if not avoided, may result in property damage.
NOTE	Provides important information.

# **Features**

The following are just a few of the many exciting features of your new Toshiba wide screen, integrated HD LED TV:

- Integrated digital tuning (8VSB ATSC and QAM)—
   Eliminates the need for a separate digital converter set-top box (in most cases)
- 1366 x 768 output resolution (32L1460UC)
   1920 x 1080 output resolution (40/50L1460UC)
- Two HDMI®—Digital, High-Definition Multimedia Interfaces with 1080p input support. See "Connecting an HDMI® or DVI device to the HDMI® input" on page 28
- ★ ColorStream<sup>TM</sup> HD—High-resolution component video input and shared composite video input, see "Connecting a Bluray<sup>TM</sup>/ DVD player, satellite receiver with ColorStream<sup>TM</sup> or VCR" on page 27
- Digital Audio Out—Optical audio connection with Dolby® Digital optical output form. See "Connecting a digital audio system" on page 32
- DTS TruSurround<sup>TM</sup>—Delivers an immersive virtual surround sound experience over front facing speaker configurations, complete with rich bass, high frequency detail and clear dialog.
- ColorMaster<sup>TM</sup>—Allows you to adjust the TV's standard colors, see "ColorMaster<sup>TM</sup>" on page 91
- Cinema Mode—Shows film-like quality movies, see "Cinema Mode" on page 93
- DynaLight<sup>TM</sup>—Backlight control monitors the brightness of each video frame and automatically adjusts backlight intensity based on the content to create higher dynamic contrast, for deeper blacks and increased depth, see "DynaLight<sup>TM</sup>" on page 93
- DNR—Digital picture Noise Reduction, see "DNR" on page 94
- Edge Enhancer—Lets you adjust the levels for your desired picture settings and achieve a sharper picture, see "Edge Enhancer" on page 94
- HDMI® CEC—Allows control of external devices from the TV remote via HDMI® connection, see "Using HDMI® CEC" on page 85
- Media Player—Allows you to view photo files and play music files, see "Using the Media Player" on page 77



**ENERGY STAR<sup>®</sup>** qualified

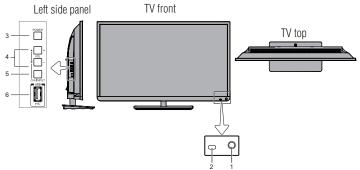
# Overview of installation, setup, and use

Follow these steps to set up your TV and begin using its many exciting features.

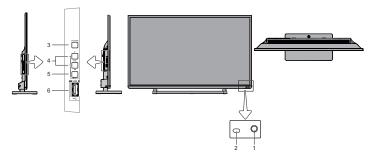
- 1 Carefully read the important safety, installation, care, and service information. Keep this document for future reference.
- 2 To choose a location for the TV:
  - Read "Important notes about your TV" on page 8
  - Place the TV on the floor or a sturdy, level, stable surface that can support the weight of the unit. Secure the TV to a wall, pillar, or other immovable structure, see 26) on page 5.
  - Place the TV in a location where light does not reflect on the screen.
  - Always leave a space of at least 4 (four) inches around the TV. The slots and openings are provided to protect the TV from overheating and to help maintain reliable operation of the TV.
- 3 Do not plug in any power cords until after you have connected all cables and devices to your TV.
- 4 Before connecting cables or devices to the TV, learn the functions of the TV's connections and controls, see "Overview of cable types" on page 23
- 5 Connect your other electronic device(s) to the TV, see "Connecting Your TV" on page 23
- 6 Install the batteries in the remote control, see "Installing batteries" on page 35
- 7 See "Using the Remote Control" on page 35 for an overview of the buttons on the remote control.
- 8 After connecting all cables and devices, plug in the power cords for your TV and other devices. Then press the **POWER** button on the TV control panel or remote control to turn on the TV.
- 9 See "Navigating the menu system" on page 43 for a quick overview of navigating the TV's menu system.
- 10 To program channels into the TV's channel memory, see "Auto Tuning" on page 46

- For details on using the TV's features, see Chapter 6 and Chapter 7
- 12 For help, refer to "Troubleshooting" on page 95
- **13** For technical specifications, see "Specifications" on page 101
- **NOTE** If the TV stops responding to the buttons on the remote control or TV control panel and you cannot turn the TV off or on, unplug the power cords for a few seconds and then plug them in and try again.

# TV front and side panel controls and connections



(Sample Illustration) 32L1460UC - Front and side panel controls and connections

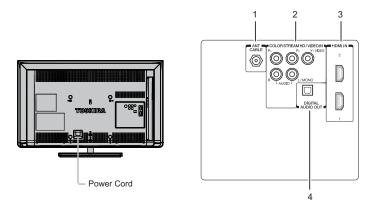


(Sample Illustration) 40/50L1460UC - Front and side panel controls and connection

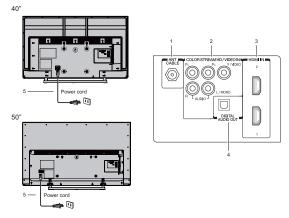
- 1 **Power On/Standby LED**—Power indicator light, (glows red when the TV power is Off).
- 2 **Remote sensor (embedded)**—Point the remote control toward this remote sensor.
- **3 POWER**—Turns the TV On/Off.
- 4 ▲/▼/+/— Adjust the volume level, change the channel, or change the input or source you are viewing, depending on the mode, which is selected by the CH/INPUT button.
- 5 CH/INPUT—Switches the function of the  $\blacktriangle/ \lor +/-$  buttons to select the volume, channel, or input mode.
  - In Volume mode, the buttons increase or decrease the volume.
  - In Channel mode, the buttons change the channel up or down.
  - In Source mode, the buttons toggle the input from one source to the next.
- 6 USB port—Accesses JPEG or MP3 files, or updates TV firmware.

# **TV back panel connections**

For explanations of cable types and connections, see "Overview of cable types" on page 23



## (Sample Illustration) 32L1460UC - Back panel connections



(Sample Illustration) 40/50L1460UC - Back panel connections

- 1 ANT/CABLE—Antenna input that supports analog (NTSC) and digital (ATSC) off-air antenna signals and analog and digital cable TV (QAM) signals.
- 2 ColorStream<sup>™</sup> HD—High-resolution component video input and shared composite video input, see "Connecting a Blu-ray<sup>™</sup> / DVD player, satellite receiver with ColorStream<sup>™</sup> or VCR" VCR" on page 27

	<b>HDMI®</b> IN—High-Definition Multimedia Interface input receives digital audio and uncompressed digital video from an HDMI® device or uncompressed digital video from a DVI device. HDMI® connection is necessary to receive 1080p signals.
	<b>Digital Audio out</b> — Optical audio output in Dolby <sup>®</sup> Digital or PCM (pulse-code modulation) format for connecting an external Dolby <sup>®</sup> Digital decoder, amplifier, or home theater system with optical audio input.
	<b>Power Cord</b> — Plug one end of the power cord into the jack on the back of the unit, and the other end into a live electrical outlet. (Only for 40/50L1460UC models.)
CAUTION	The included power cord is for use with this unit only. Do not use it with other equipment. If you are not going to use the unit for an extended period of time, disconnect the power cord from the wall outlet. Whenever the power cord is plugged into the wall outlet, it will draw some power, even when the unit is off.
NOTE	Component/Standard (composite) video cables carry only video information; separate audio cables are required for a complete connection.



# **Connecting Your TV**

# **Overview of cable types**

Before purchasing cables, know the connector types your devices require. You can purchase cables from most stores that sell audio/ video devices.

# Coaxial (F-type) cable



(Sample Illustration) Coaxial cable

Coaxial (F-type) cable connects your antenna, cable TV service, and/or cable converter box to the ANT/CABLE input on your TV.

**NOTE** Please tighten this connection by hand. Using tools may damage the connection.

# Standard A/V cables (red/white/yellow)



(Sample Illustration) Standard AV cables

Standard A/V cables (composite video) usually come in sets of three, and connect to video devices with analog audio and composite video output. These cables (and the related inputs on your TV) are typically color-coded according to use: yellow for video, red for stereo right audio, and white for stereo left (or mono) audio.

# Component video cables (red/green/blue)



Component video cables (red/green/blue)

Component video cables come in sets of three and connect with video devices with component video output. (ColorStream<sup>TM</sup> is Toshiba's brand of component video.) These cables are typically color-coded red, green, and blue. Separate audio cables are required for a complete connection.

NOTE

Component video cables provide better picture quality than composite video cables.

# HDMI® cable (with HDMI Logo)



(Sample Illustration) HDMI<sup>®</sup> cable

HDMI<sup>®</sup> (High-Definition Multimedia Interface) cable connects to devices that have an HDMI<sup>®</sup> output. An HDMI<sup>®</sup> cable delivers digital audio and video in its native format. Separate audio cables are not required, see "Connecting an HDMI® or DVI device to the HDMI® input" on page 28.

NOTE HDMI<sup>®</sup> cables provide the best audio and picture quality.

# **Optical audio cable**



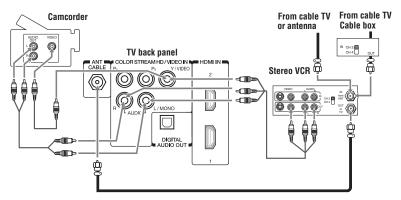
## (Sample Illustration) Optical audio cable

Optical audio cable connect receivers with Dolby<sup>®</sup> Digital or PCM (pulse-code modulation) optical audio input to the TV's Digital Audio Out terminal, see "Connecting a digital audio system" on page 30

# About the connection illustrations

You can connect different types and brands of devices to your TV in several different configurations. The connection illustrations in this manual are representative of typical device connections only. The input/output terminals on your devices may differ from those illustrated herein. For details on connecting and using your specific devices, refer to each device's User's Guide.

# Connecting a VCR, antenna, cable TV, or camcorder



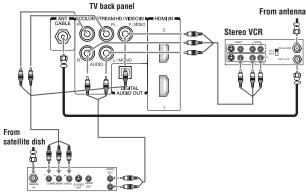
# (Sample Illustration) 32/40/50L1460UC—Connecting to a VCR, antenna, or cable TV, or camcorder

Items needed:

- Coaxial cables
- Standard AV cables If you have a mono VCR, connect L/MONO on the TV to your VCR's audio out terminal using the white audio cable only.
- Standard audio cable

NOTE	The menu setting may need to be changed in order to watch the shared input between composite and component video. Composite and component video cannot be used simultaneously.			
NOTE	When you use a cable box, you may not be able to use the remote control to program or access certain features on the TV. When you use ColorStream™ HD or Video, switch AV input mode appropriately.			
To vie	w the antenna or cable signal:			
	ANT/CABLE video input source on the TV.*			
	w basic and premium cable channels:			
the TV	off the VCR. Select the <b>ANT/CABLE</b> video input source on <i>X</i> .* Tune the TV to channel 3 or 4 (whichever channel the pox output is set to). Use the cable box controls to change els.			
To view the VCR or camcorder video:				
on the *To se	<ul> <li>Turn on the VCR or camcorder video. Select VIDEO input source on the TV.*</li> <li>*To select the video input source, press the INPUT button on the remote control, see "Selecting the video input source" on page 51</li> </ul>			
NOTE	The unauthorized recording, use, distribution, or revision of television programs, videotapes, DVDs, and other materials is prohibited under the Copyright Laws of the United States and other countries, and may subject you to civil and criminal liability.			

# Connecting a Blu-ray™ / DVD player, satellite receiver with ColorStream™ or VCR



Satellite receiver, Blu-ray™ or DVD player

(Sample Illustration) 32/40/50L1460UC—Connecting a Blu-ray<sup>TM</sup> /DVD player or Satellite receiver with ColorStream<sup>TM</sup> (or VCR).

# NOTE ColorStream<sup>™</sup> and composite video cables cannot be connected simultaneously.

Items needed:

- Coaxial cables
- Standard AV cables If you have a mono VCR, connect L/MONO on the TV to your VCR's audio out terminal using the white audio cable only.
- Standard audio cables
- Component video cables
  - You can connect the component video cables (plus audio cables) from the DVD player or satellite receiver to the COLOR STREAM HD terminal in the TV. The COLOR STREAM HD terminal can be used to display Progressive (480p, 720p) and Interlaced (480i, 1080i) scan systems. Please note that 1080p is not supported. Check the User's Guide of the DVD player in order to determine the best output signal available.
  - If your DVD player or satellite receiver does not have component video, connect a standard A/V cable to the AUDIO/VIDEO terminal. If your DVD player has HDMI<sup>®</sup> video, see "Connecting an HDMI® or DVI device to the HDMI® input" on page 28

# NOTE When you use ColorStream<sup>™</sup> HD or Video, switch AV input mode appropriately.

#### To view antenna or Cable channels:

Select the ANT/CABLE video input source on the TV.\*

#### To view the DVD player:

Turn on the DVD player. Select the **COLORSTREAM HD** video input source on the TV.\*

# To view satellite programs using the component video connections:

Turn on the satellite receiver. Select the **COLORSTREAM HD** video input source on the TV.\*

## To view the VCR or view and record antenna channels:

Turn on the VCR. Tune the VCR to the channel you want to watch. Select the **VIDEO** input source on the TV.\*

#### To record a TV program while watching a DVD:

Turn on the VCR. Tune the VCR to the channel to record. Select the **COLORSTREAM HD** video input source on the TV\* to view the DVD.

\*To select the video input source, press the **INPUT** button on the remote control, see "Selecting the video input source" on page 51.

# **NOTE** The unauthorized recording, use, distribution, or revision of television programs, videotapes, DVDs, and other materials is prohibited under the Copyright Laws of the United States and other countries, and may subject you to civil and criminal liability.

# Connecting an HDMI® or DVI device to the HDMI® input

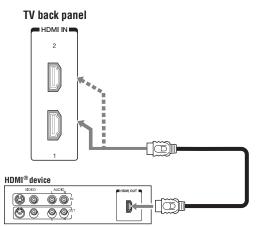
The HDMI<sup>®</sup> input on your TV receives digital audio and uncompressed digital video from an HDMI<sup>®</sup> source device, or uncompressed digital video from a DVI (Digital Visual Interface) source device.

This input is designed to accept HDCP (High-Bandwidth Digital-Content Protection) program material in digital form from EIA/ CEA-861-D- compliant<sup>[1]</sup> consumer electronic devices (such as a set-top box or DVD player with HDMI<sup>®</sup> or DVI output).

The HDMI<sup>®</sup> input can accept and display various signal formats. For detailed signal specifications, see "HDMI® signal formats" on page 104. Supported Audio format, see "HDMI® input" on page 103. **NOTE** To connect a computer to the HDMI<sup>®</sup> input, see "Connection to the TV's HDMI<sup>®</sup> terminal" on page 33.

To connect an HDMI<sup>®</sup> device, you will need one HDMI<sup>®</sup> cable (type A connector) per HDMI<sup>®</sup> device.

- For proper operation, it is recommended that you use an HDMI<sup>®</sup> cable with the HDMI<sup>®</sup> Logo(HDMI<sup>®</sup>).
- HDMI<sup>®</sup> cables transfer both video and audio. Separate analog audio cables are not required (see illustration).



(Sample Illustration) 32/40/50L1460UC—HDMI<sup>®</sup> connections

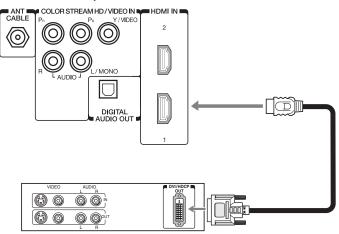
## To view the HDMI® device video:

Select **HDMI 1** or **HDMI 2** video input source on the TV. (Press the **INPUT** button on the remote control. For more information, see "Selecting the video input source" on page 51)

To connect a DVI device, you will need:

HDMI<sup>®</sup> to DVI adapter cable For proper operation, the length of an HDMI<sup>®</sup> to DVI adapter cable should not exceed 9.8 ft (3m). The recommended length is 6.6 ft (2m).

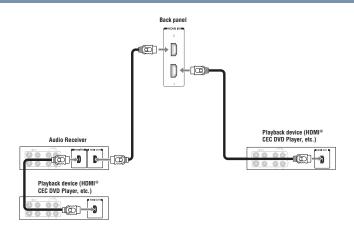
#### TV back panel



(Sample Illustration) 32/40/50L1460UC—DVI connections

# NOTE To ensure that the HDMI® or DVI device is reset properly: When turning on your electronic components, turn on the TV first, and then the HDMI® or DVI device. When turning off your electronic components, turn off the HDMI® or DVI device first, and then the TV. NOTE EIA/CEA-861-D compliance covers the transmission of uncompressed digital video with high-bandwidth digital content protection, which is being standardized for reception of high-definition video signals. Because this is an evolving technology, it is possible that some devices may not operate properly with the TV.

You can control the basic functions of connected audio/video devices using the TV's remote control if you connect a HDMI<sup>®</sup> CEC compatible audio receiver or playback device. The HDMI<sup>®</sup> CEC Control feature uses CEC technology as regulated by the HDMI<sup>®</sup> standard.



(Sample Illustration) 32/40/50L1460UC—HDMI<sup>®</sup> CEC compatible audio receiver and playback device connections

To connect an HDMI<sup>®</sup> device, you will need one HDMI<sup>®</sup> cable (type A connector) per HDMI<sup>®</sup> device (see "Overview of cable types" on page 23)

NOTE	<ul> <li>If several devices are connected, HDMI® CEC Control feature may not operate properly.</li> <li>For proper operation, it is recommended that you use an HDMI® cable with the HDMI® Logo (HDMM).</li> </ul>
Bef	fore controlling the device(s):
*	After completing the above connections, configure the HDMI <sup>®</sup> CEC Setup menu with the desired settings, see "Setting up HDMI® CEC" on page 87.
*	The connected devices must also be configured. For details, see the operation manual for each device.
٠	This feature uses the CEC technology as regulated by the HDMI <sup>®</sup> standard.
*	This feature is limited to models incorporating Toshiba's HDMI <sup>®</sup> CEC. However, Toshiba is not liable for those operations. Refer to the individual instruction manuals for compatibility information.

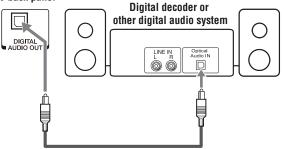
**NOTE** This feature may not work properly depending on the devices that are connected.

# Connecting a digital audio system

The TV's DIGITAL AUDIO OUT terminal outputs a Dolby® Digital or 2-channel down-mixed PCM (pulse-code modulation) signal for use with an external Dolby® Digital decoder or other external audio system with optical audio input.

You will need an optical audio cable (Use an optical audio cable that has the larger "TosLink" connector and not the smaller "mini-optical" connector.)

TV back panel



# (Sample Illustration) 32/40/50L1460UC—Connecting a digital audio system

To control the audio:

- 1 Turn on the TV and the digital audio device.
- 2 Press the MENU button on the remote control and open the **Sound** menu.
- 3 Press the  $\blacktriangle/\lor$  (arrow) buttons to select **Digital Audio Output** and then press the **ENTER** button.
- 4 Press the **◄**/**▶** (arrow) buttons to select either **Auto** or **PCM**, depending on your device.

- **NOTE** Some audio systems may not be compatible with Dolby<sup>®</sup> Digital bitstream signal.Older audio systems that are not compatible with standard optical out signals may not work properly, creating a high noise level that may damage speakers or headphones. THIS DAMAGE IS NOT COVERED BY YOUR WARRANTY. The DIGITAL AUDIO OUT terminal may not output some digital audio sources because of copy restrictions.
  - The Dolby<sup>®</sup> Digital format is available in the following situations:
     When tuned to a digital RF channel
  - When an HDMI<sup>®</sup> input is used.

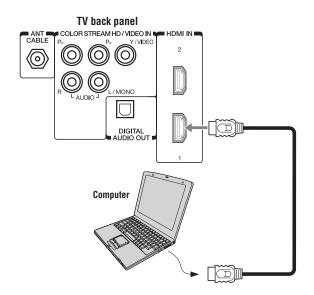
# **Connecting a computer**

With HDMI<sup>®</sup> connection, you can view your computer's display on the TV and hear the sound from the TV's speakers.

# Connection to the TV's HDMI® terminal

When connecting a computer with a DVI terminal, use an HDMI<sup>®</sup>-to-DVI adapter cable and analog audio cables.

When connecting a computer with an HDMI<sup>®</sup> terminal, use an HDMI<sup>®</sup> cable (type A connector). Separate analog audio cables may not be necessary, depending on computer hardware and setup, see "Connecting an HDMI® or DVI device to the HDMI® input" on page 28



(Sample Illustration) 32/40/50L1460UC Series - Connecting a computer to the TV through the HDMI<sup>®</sup> terminal.

**NOTE \*** The edges of the picture may be hidden.

If receiving a 480i (HDMI<sup>®</sup>), 480p (HDMI<sup>®</sup>), 720p, 1080i, or 1080p signal program, Native mode scales the video to display the entire picture within the borders of the screen (i.e. no overscan).

# **Chapter 3**

# **Using the Remote Control**

# **Installing batteries**

To install batteries :

Remove the battery cover from the back of the remote control.

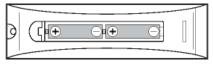
Squeeze tab and lift cover

1

tab		 
tab ver	Ы	
		 <u> </u>

(Sample Illustration) Removing the remote back cover

2 Insert two AAA batteries, corresponding to the (+) and (-) markings on the battery compartment.



(Sample Illustration) Installing the batteries

3 Replace the battery cover.

**CAUTION** Do not expose batteries to excessive heat such as sunshine, fire, etc.



## Using the Remote Control

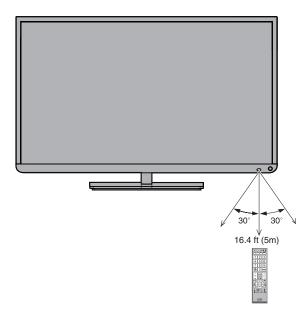
Remote control effective range

#### 

- Dispose of batteries in a designated disposal area.
- Always consider the environment when disposing of batteries.
- Always follow applicable laws and regulations.
- If the remote does not operate correctly, or if the operating range is reduced, replace the batteries.
- Always replace both batteries with new ones. Never mix battery types or use new and used batteries together.
- Always remove batteries from the remote if they are dead or if the remote control is not to be used for an extended period of time. This prevents battery acid from leaking into the battery compartment.

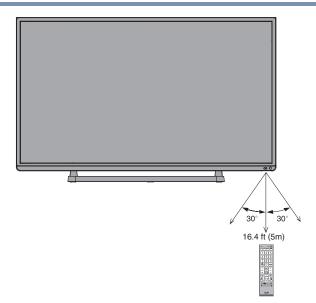
# **Remote control effective range**

For optimum performance, aim the remote control directly at the TV and make sure there is no obstruction between the remote control and the TV.



(Sample Illustration) 32L1460UC-Remote control effective range

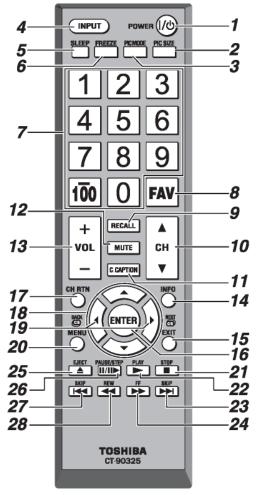
36





## Learning about the remote control

The buttons used for operating the TV are described below. For the HDMI<sup>®</sup> CEC remote control functions, see "HDMI<sup>®</sup> CEC playback device Blu-ray<sup>TM</sup>/DVD player, etc.) control" on page 85





NOTE	The error message "NOT AVAILABLE" may appear if you press a button for a function that is not available.
1	The <b>POWER</b> button turns the TV <b>On/Off</b> . When the TV is off, the power LED indicator on the TV front glows red.
2	The <b>PIC SIZE</b> button cycles through the picture sizes, see "Selecting the picture size" on page 60
3	The <b>PIC MODE</b> button selects the picture mode, see "Adjusting the picture" on page 66
4	The <b>INPUT</b> button selects the video input source, see "Selecting the video input source" on page 51
5	The <b>SLEEP</b> button accesses the sleep timer, see "Setting the sleep timer" on page 83
6	The <b>FREEZE</b> button freezes the picture. Press again to restore the moving picture, see "Using the FREEZE feature" on page 65
7	The <b>Channel Number</b> buttons ( <b>0-9</b> , and <b>Dash 100</b> ) directly tune channels. The ( <b>Dash 100</b> ) button allows you to enter two part channel numbers, see "Storing channels in memory (optional)" on page 46 or to edit the Favorites List, see "Favorites browser" on page 55.
8	The <b>FAV</b> button accesses the Favorites List in the Channel Browser, see "Favorites browser" on page 55
9	The <b>RECALL</b> button displays TV status information.
10	The <b>CH</b> $\blacktriangle/ \bigtriangledown$ (arrow) buttons cycle through programmed channels (when no on-screen menu is present), see "Tuning channels using the Channel Browser" on page 54
11	The <b>C. CAPTION</b> button accesses closed captions, see "Using closed captions" on page 68
12	The <b>MUTE</b> button reduces or turns off the sound, see "Muting the sound" on page 70
13	The <b>VOL</b> (+ –) buttons adjust the volume level.
14	The <b>INFO</b> button displays TV status information as well as program details, when available, see "Displaying TV status information" on page 89
15	The EXIT button closes on-screen menus.
16	The <b>ENTER</b> button activates highlighted items in the main menu system.

- 17 The CH RTN button returns to the last viewed channel or source, see "Switching between two channels using Channel Return" on page 59
- 18 The Arrow buttons  $(\blacktriangle/\triangledown/\checkmark)$  select or adjust programming menus when a menu is on-screen.
- 19 The Arrow buttons (◄/►) open the Channel Browser and tune to the previous/next channel in the channel history when TV programming is on-screen. See "Tuning channels using the Channel Browser" on page 54
- 20 The MENU button accesses the main TV menu system. See "Navigating the menu system" on page 43. The following key functions allow you to control Toshiba HDMI<sup>®</sup> CEC compatible devices via HDMI<sup>®</sup> connection. See "Using HDMI® CEC" on page 85.
- 21 The **STOP** button stops playback of the loaded playback device.
- 22 The PLAY button begins playback of the loaded playback device.
- 23 The SKIP forward button skips forward to locate later DVD chapters.
- 24 The FF button fast-forwards the playback device. (Press during play mode to view the picture moving rapidly forward.)
- **25** The **EJECT** button ejects the DVD or tape.
- 26 The PAUSE/STEP button suspends play or record temporarily. Press during play or record mode to pause the picture; press again to restart.
- 27 The SKIP reverse button skips to the beginning of the current DVD chapter or locates the previous chapter.
- **28** The **REW** button rewinds/reverses the playback device. (Press during play mode to view the picture moving rapidly backward).

40



## Menu Layout and Navigation

## Main menu layout

The tables below and on the next pages provide a quick overview of your TV's menu system. To open the menus (illustrated below), press **MENU** on the remote control.

Icon	Item	Option
Picture	Picture Mode	Dynamic / Standard / Movie / Game / PC / Store
		<b>NOTE</b> Store Mode is only available if the TV is set to Store Mode at initial setup. This option is hidden in the Home Mode. <b>NOTE</b> When the TV is set to <b>Store</b> in the initial menu or <b>Store</b> in the Installation Menu, the set will always reset to <b>Store</b> Picture Mode.
	Reset	Reverts to the factory defaults for the selected picture mode
	Backlight	Adjusts Backlight
	Contrast	Adjusts Contrast
	Brightness	Adjusts Brightness
	Color	Adjusts Color
	Tint	Adjusts Tint
	Sharpness	Adjusts Sharpness
	Advanced Picture Settings	Opens the Advanced Picture Settings menu
	Display Settings	Opens the Display Settings menu

## Menu Layout and Navigation

42

Main menu layout

Icon	Item	Option
Sound	Balance	Adjusts Balance
0	Bass	Adjusts Bass
	Treble	Adjusts Treble
	DTS TruSurround	On / Off
	Sound Mode	Standard/Music/Movie/Clear Voice
	Stable Sound	On/Off
	Dynamic Range Control	On / Off
	Sound Bar Connection	Yes/No
	TV Speakers	On/Off
	MTS	Stereo / Mono / SAP
	Digital Audio Selection	Offers different audio choices for digital channels
	Primary Audio Language	Primary audio choice for digital channels
	Digital Audio Output	Opens the Digital Audio Output menu
Options	Channel Options	Opens Channel Options menu
	Closed Captions	Opens Closed Captions menu
	MediaShare Setup	Opens MediaShare Setup menu
	HDMI CEC Control Setup	Opens HDMI CEC Control Setup menu
	HDMI CEC Player Control	Opens HDMI CEC Player Control menu
	Input Options	Opens Input Options menu
	Channel Browser Setup	Opens Channel Browser Setup menu
	Power Management	Opens Power Management menu
	Panel Lock	On / Off
	HDMI Information Display	On / Off
	Parental PIN Setup	Opens Parental PIN Setup menu
	Parental Control and Locks	Opens Parental Control and Locks menu
Installation	Menu Language	English / Français / Español
	Time Zone	Eastern / Newfoundland / Atlantic / Hawaii / Alaska / Pacific / Mountain / Central
	Daylight Saving Time	On / Off
	Store / Home Mode	Home / Store
	Channel Tuning	Opens Channel Tuning menu
	Quick Setup	Executes Quick Setup
	Reset TV	Resets to Factory Defaults

Item	Option
Sleep Timer	10-minute increments, from 0 min to a maximum of 12 hours
Game Timer	Off/30 min/60 min/90 min/120 min
System Information	Opens the System Information screen
Auto Demo	Opens Auto Demo menu
	NOTE Only available if the TV is set to Store mode.
	Sleep Timer Game Timer System Information

## Navigating the menu system

You can use the buttons on the remote control to access and navigate your TV's on-screen menu system.

1 Press the **MENU** button to open the menu system.

Picture ►	< Picture	
	Picture Mode	Standard
8 Sound	Reset	
424	Backlight	55
Options	Contrast	95
	Brightness	0
HINSTALLATION	Color	0
	Tint	0
Timers	Sharpness	0
	Advanced Picture Setting	
Get Help	Display Setting	

(Sample Image) Navigating the menu system

- 2 When a menu is open, use the A/V/A/ (arrow) buttons on the remote control to move in the corresponding direction in the menu.
- 3 Press the ENTER button to save your menu settings or select a highlighted item.A highlighted menu item appears in a different color in the

A highlighted menu item appears in a different color in the menu.

- 4 All menus close automatically if you do not make a selection within approximately 60 seconds.
- 5 To close a menu instantly, press the **EXIT** button.

**NOTE** The menu background may sometimes appear black, depending on the signal the TV is receiving. This is not a sign of malfunction.

## **Chapter 5**

## Setting up your TV

## **Initial Setup**

When you first turn on or reset the TV, the Initial Setup window will appear.

- 1 In the Menu Language field, press the ◄/►(arrow) buttons to select your preferred language.
- 2 Press the ▲/▼(arrow) buttons to select **Time Zone**. Then set your desired time zone, using the ◀/▶ (arrow) buttons and press the **ENTER** button.

The Store / Home Mode settings window appears.

- For normal home use, press the </ ► (arrow) buttons to select Home, and then press the ENTER button.</li>
   The ANT/CABLE In setup window appears.
- 4 Press the ◄/►(arrow) buttons to select the input source (Cable or Antenna), and then press the ENTER button.
- 5 Press the **ENTER** button to select Start Scan and continue with the Auto Tuning.

You must select a Language and either **Home/Store** mode, before you can exit out of the Setup Menu. The **EXIT** button will not function until these selections have been made.

## Installation setup selection

## Menu language

You can choose from three different menu language settings (English, Français, and Español) for the on-screen display of menus and messages.

#### To select the menu language:

- 1 Press the **MENU** button and open the **Installation** menu, then highlight **Menu Language**.
- 2 Press the ◄/►/▲/▼(arrow) buttons to select your preferred language.

Picture	< Installation		
_	Menu Language	English	English
Sound	Time Zone	Eastern	Français
مينه	Daylight Saving Time	Off	Español
Options	Store / Home Mode	Home	
	Channel Tuning		
🕍 Installation 🕨	Quick Setup		
	Reset TV		
Timers			
Get Help			

(Sample Image) Selecting the menu language

3 Press the **EXIT** button to close the **Installation** menu.

## **ANT/CABLE IN**

This setting configures the input source for the **ANT/CABLE** terminal.

- 1 Press the **MENU** button and open the **Installation** menu.
- 2 Highlight **Channel Tuning**, and then press the **ENTER** button.

Picture	< Installation	
_	Menu Language	English
Sound	Time Zone	Eastern
474	Daylight Saving Time	Off
Options	Store / Home Mode	Home
	Channel Tuning	•
🗳 Installation	Quick Setup	
	Reset TV	
(Ť) Timers		
🕜 Get Help		

(Sample Image) Installation - Setup selection

3 Open the **Channel Tuning** menu, highlight **ANT/CABLE In**, and then press the **ENTER** button.

Picture	< Chanel Tuning	
_	ANT/CABLE In Cable	Antenna
Sound	Auto Tuning	Cable
	Manual Tuning	_
Options	Channel List	_
Installation 🕨		
(Ť) Timers		
🕜 Get Help		

*(Sample Image) Channel tuning menu - Input configuration selection* 

4 Press the ▲/▼(arrow) buttons to select the input source (Cable or Antenna), and then press the ENTER button to save your new settings.

## Storing channels in memory (optional)

To make sure your TV stops only on the channels you want when you press the  $\blacktriangle/ \lor$  (arrow) buttons on the remote control or the control panel, store those channels in the TV's memory.

## **Auto Tuning**

You can set up the TV to detect all active channels in your area and store them in its memory. Then you can manually add or erase individual channels from memory.

NOTE	٠	You must set up the ANT/CABLE input source before programming channels. See "ANT/CABLE IN" on page 45.
	*	The automatic channel programming process will erase channels that were previously programmed into the TV's memory.
	*	To tune the TV to a channel not programmed in the channel memory, you must use the <b>Channel Number</b> buttons on the remote control.
	٠	Programming channels when the <b>ANT/CABLE</b> input is configured for Cable will take substantially longer than when the antenna input is configured for Antenna. This is normal; however, once channel programming is finished, you should not have to repeat the programming process again unless your Cable TV service lineup changes significantly.

To program channels automatically:

- 1 Configure the antenna input source, if you have not already done so, see "ANT/CABLE IN" on page 45.
- 2 Press the **MENU** button and open the **Installation** menu.
- 3 Highlight Channel Tuning, and then press the ENTER button.

Picture	< Installation	
Sound	Menu Language Time Zone	English Eastern
424	Daylight Saving Time	Off
Options	Store / Home Mode	Home
	Channel Tuning	▶
🕍 Installation	Quick Setup	
L	Reset TV	
Timers		
Get Help		

### (Sample Image) Setup menu - Installation selection

4 Highlight Auto Tuning, and then press the ENTER button to open the Channel Program menu to begin channel programming.

<b>^</b>	ANT/CABLE In Cable Scanning channels, please wait	
		6%
	Number of Channels Found - 7	
	Scanning Analog Channels	
	Channel - 9	
	Cancel	

### (Sample Image) Installation menu - Channel selection

The TV will automatically cycle through all the antenna/cable channels, and store all active channels in the channel memory. While the TV is cycling through the channels, the message "Scanning channels, please wait" appears.

5 To cancel channel programming, press the EXIT button on the remote control or highlight Cancel in the on-screen display, and then press the ENTER button.
 When channel programming is complete, press the CH ▲/▼(arrow) buttons to view the programmed channels.

## **Manual Tuning**

After storing channels in memory, you can manually enter channels if the physical channel is known.

- 1 Press the **MENU** button and open the **Installation** menu.
- 2 Highlight Channel Tuning and then press the ENTER button.
- 3 Highlight **Manual Tuning** and then press the **ENTER** button, the **Manual Tuning** form will appear.
- 4 Use buttons 0–9 on the remote control to enter the channel number (for example, 56)

5	Press the ENTER	button to start Manual Tuning.
---	-----------------	--------------------------------

Type:	Description:
ATV	Analog channel.
DTV	Digital channel.

## Setting channel skip

To prevent a channel from being viewed, you can set it to be skipped.

1 From the **Options** menu, highlight **Channel Options**, and then press the **ENTER** button.

The list of channels appears.

Channel O	ptions			
Ch.	Туре	-@•	8	
5	ATV			•
6	ATV			
7	ATV			
8	ATV			
9	ATV			
10	ATV			
11	ATV			
12	ATV			

#### (Sample Illustration) Channel Options

Press the ▲/▼(arrow) buttons to select a channel position to be skipped, and then press the ENTER button.
 A check will appear in the box. To remove the check, press the ENTER button again.

To add a channel to the channel memory:

Highlight the checked box next to the channel number you wish to add, and then press the ENTER button to remove the check.

NOTE	You can also block specific channels so that they cannot be tuned until you unlock them. For information, see "Locking channels" on page 75.
	page 75.

To manually add digital sub-channels on a physical channel:

Use the Channel Numbers and the (Dash 100) on the remote control to enter the channel number (for example, 56–1). If the channel is found, the number will be added to the list and the box will be unchecked. If the channel is not found, a message appears.

## **NOTE** Skipped channels cannot be selected with the $CH \blacktriangle / \lor (arrow)$ buttons; however, they can be accessed using the number keys on the remote control.

## Setting the AV input mode

This setting determines the configuration of the shared AV input on your TV. You can set this input for either **ColorStream HD** or **Video**.

Add the following descriptions:

To set the **AV Input** mode:

- 1 From **Options** menu, highlight **Input Options**, and then press the **ENTER** button.
- 2 Press ▲/▼(arrow) buttons to select AV Input, and then press the ENTER button.
- 3 Press  $\blacktriangle/\lor$  (arrow) buttons to select Video or ColorStream HD, and then press the ENTER button to save your new setting.

## Setting the time zone

The Time Zone setup allows you to specify the correct time zone for your region. This feature allows the TV status information to display the correct time zone information for your viewing area.

To set the time zone:

1 In the **Installation** menu, highlight **Time Zone**, and press the **ENTER** button.

2 Press the  $\blacktriangle/\lor$  (arrow) buttons to select the region, and then press the ENTER button.

To set the Daylight Saving Time status:

- 1 In the **Installation** menu, highlight **Daylight Saving Time**, and press the **ENTER** button.
- 2 Press the  $\blacktriangle/\lor$  (arrow) buttons to select **On** or **Off**, and then press the **ENTER** button.

## Viewing the system status

1 In the **Get Help** menu, highlight **System Information**, and then press the **ENTER** button. The related information appears.

To close the screen and return to the Get Help menu:

Highlight Done in the Support Information screen, and then press the ENTER button.

To return to normal viewing, press the EXIT button.

## **Resetting Factory Defaults**

To reset all settings and channels to their factory default values:

- 1 Press the **MENU** button and open the **Installation** menu.
- 2 Highlight **Reset TV**, and then press the **ENTER** button.
- 3 Enter your PIN code (If a PIN code has been set).
- 4 A confirmation screen appears. Select **Yes**, and press the **ENTER** button. The TV will turn off automatically.

To cancel the reset process, select No, and press the ENTER button.

## **Chapter 6**

## Setting up your TV

## Selecting the video input source

To select the video input source to view:

- 1 Press the **INPUT** button on the remote control or TV control panel.
- 2 Do one of the following:
  - Press 0-3.
  - Repeatedly press the ▲/▼ (arrow) buttons on the remote control, and then press the ENTER button to change the input setting.
  - Repeatedly press the INPUT button to cycle through all the inputs. Stop pressing the INPUT button when the desired input is selected.

Selecting the video input source

Input Selection				
0	ANT / CABLE			
1	ColorStream HD			
2	HDMI 1			
3	HDMI 2			

#### (Sample Image) Input Selection screen

NOTE	*	You can label the video input sources according to the specific devices you have connected to the TV, see "Labeling the video input sources" on page 53.
	*	Sources can be "hidden," see "Labeling the video input sources" on page 53.
	*	"NO VIDEO" will appear randomly on the screen if no

- "NO VIDEO" will appear randomly on the screen if no signal is received in video input mode.
- If a CEC device is connected to an HDMI<sup>®</sup> input, the HDMI<sup>®</sup> CEC icon appears.

If an HDMI<sup>®</sup> CEC device with HDMI<sup>®</sup> switching capability (e.g. Audio Receiver) is connected to the HDMI<sup>®</sup> input, press the **INPUT** button on the remote control repeatedly to highlight **HDMI 1** or **HDMI 2**.

If the connected CEC device has any connected devices, a separate device selection pop-up window appears:

HDMI 1 - 1	Audio Receiver
HDMI 1 - 2	Player

(Sample Illustration) HDMI® setting pop-up window

Press the **INPUT** button repeatedly to highlight the desired input source, and then press the **EXIT** button.

NOTE When you select HDMI® CEC input sources from the pop-up window using the INPUT button, some HDMI® CEC devices may automatically turn on.

## Labeling the video input sources

You can label each video input source according to the type of device you have connected to each source. Choose from the following preset list of labels:

- ♦ --(default label)
- Receiver
- Cable
- DVD
- Game
- PC
- Recorder
- Satellite
- VCR
- Blu-Ray
- Hide (to hide an unused input in the Input Selection screen and in the Channel Browser Inputs list)

To label the video input sources:

- 1 In **Options** menu, highlight **Input Options** and then press the **ENTER** button.
- 2 Highlight Input Labeling, and then press the ENTER button.
- 3 Press the ▲/▼(arrow) buttons to highlight the video source you wish to label.
- 4 Press the *◄/▶* (arrow) buttons to select the desired label for that input source. If a particular input is not used, Hide can be selected as the label. This will cause that input to be grayed out in the Input Selection screen and skipped over when you press the **INPUT** button on the remote control.

Input Labeling	
Video / ColorStream HD	_
HDMI 1	_
HDMI 2	_
Reset Done	

(Sample Image) Input Labeling screen

5 To save the new input labels, highlight **Done**, and then press the **ENTER** button.

To revert to the factory default labels, highlight **Reset** and press the **ENTER** button.

Input labeling example:

The screen below left shows the default Input Selection screen (with none of the inputs labeled as a specific device). The screen below (right) is an example of how you can label the inputs if you connected a VCR to ColorStream<sup>TM</sup> HD, a video recorder to HDMI 1, and a DVD player to HDMI 2.

Input Selection	Input Selection
ANT / CABLE     ColorStream HD     HDMI 1	<ul> <li>O ANT / CABLE</li> <li>O VCR</li> <li>Q Recorder</li> </ul>
3 HDMI 2	③ DVD

No inputs labeled

All inputs labeled

(Sample Image) Input selection screens

To clear the input labels:

- 1 In **Options** menu, highlight **Input Options** and then press the **ENTER** button.
- 2 Highlight Input Labeling, and then press the ENTER button.
- 3 Highlight **Reset**, and then press the **ENTER** button.

## **Tuning channels using the Channel Browser**

The Channel Browser provides an easy navigation interface for all your channels and inputs. This feature allows you to:

- Navigate and select entries.
- Keep a list of your favorite channels, see "Favorites browser" on page 55.
- Quickly surf and tune your recently viewed channels/inputs from the Channel Browser History List.
- Surf via Browse mode (to immediately tune channels as you highlight them in the Channel Browser) or Select mode (to surf over channels in the Channel Browser before you select one to tune).
- Quickly change inputs from the Inputs List.
- Quickly select HDMI<sup>®</sup> CEC devices from the HDMI<sup>®</sup> CEC List.

## **Favorites browser**

.

The Favorites Browser allows you to quickly set up a favorite channels/inputs list that is integrated into the Channel Browser.

To add a favorite channel/input:

- 1 Tune to the channel or input.
- 2 Press and hold the **FAV** button for a few seconds.

NOTE	The channel or input is added to the beginning of the Favorites list on the left side of the Channel Browser.
То	delete a favorite channel/input:
1	Press the <b>FAV</b> button to open the Favorites browser list.
2	Highlight the channel or input to delete by pressing <b>BACK CB</b> or <b>NEXT CB</b> arrow buttons.
3	Press and hold the <b>(Dash 100)</b> button for a few seconds. The channel/input will be removed from the Favorites list.
То	set up the Channel Browser:
1	In the <b>Options</b> menu, highlight <b>Channel Browser Setup</b> , and then press the <b>ENTER</b> button.
2	Press the $\blacktriangle$ (arrow) button to highlight <b>Navigation</b> , and then press the $\blacktriangleleft/\triangleright$ (arrow) buttons to select either <b>Browse Mode</b> or <b>Select Mode</b> .
C	Channel Browser Setup
	Navigation Browse Mode
	History List On
	ANT/CABLE List On
	Inputs List On
	Favorites List     On       HDMICEC List     Off
	Reset Done
(Sa	mple Image) Channel browser setup screen

3 Press the ▼(arrow) button to highlight History List, ANT/ CABLE List, Input List, Favorites List or HDMI CEC List, and then press the ◄/▷ (arrow) buttons to select On or Off.

NOTE	<b>*</b> <b>*</b>	The History List will be cleared every time the TV is powered off. HDMI <sup>®</sup> CEC List is automatically grayed out and set to <b>Off</b> when <b>Enable HDMI<sup>®</sup> CEC</b> is switched to Off. See "Using HDMI <sup>®</sup> CEC" on page 85.
		See Using HDMIR CEC on page 85.

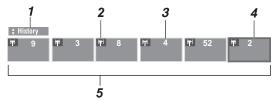
4 To save the new entries, highlight **Done**, and then press the **ENTER** button.

To return to factory defaults, highlight **Reset**, and then press the **ENTER** button.

To open the Channel Browser:

- Press BACK CB or NEXT CB arrow buttons on the remote control.
- Press the BACK CB arrow button to surf backward through the previously tuned channels in the History list, the channels in the ANT/CABLE channel list, the inputs in the Inputs list, the favorite channels/inputs in the Favorites list, or the HDMI<sup>®</sup> CEC devices in the HDMI<sup>®</sup> CEC List.
- Press the NEXT CB arrow button to surf forward through the channel History, the ANT/CABLE channel list, the Inputs list, the favorite channels/inputs in the Favorites list, or the HDMI<sup>®</sup> CEC List.

## **Elements of the Channel Browser**



(Sample Illustration) Channel Browser elements

- 1 Current list (History, ANT/CABLE, Inputs, Favorites, or HDMI<sup>®</sup> CEC).
- 2 Channel or input type.
- 3 Channel or input currently being viewed.
- 4 Channel or input that is currently highlighted in the browser.
- 5 Channels stored in the Current List.

To toggle among the available lists:

After opening the Channel Browser, press the  $\blacktriangle/\lor$  (arrow) buttons to toggle through the **History**, **ANT/CABLE**, **Inputs**, **Favorites**, or **HDMI CEC** options.

**NOTE** • The Channel Browser opens in History List by default. Once another list has been selected, the Channel Browser will open in the last selected list.

- If all lists are turned off, pressing BACK CB or NEXT CB arrow buttons or the FAV button will not display the Channel Browser. If Favorites List is turned off, the FAV button will have no effect.
- Pressing the FAV button will display the Channel Browser Favorites list regardless of the last selected list in the Channel Browser.

To tune to a channel or input in Browse mode:

- 1 While watching TV, press **BACK CB** or **NEXT CB** arrow buttons to display the Channel Browser and surf back to a previous item or surf forward to the next item in the list. In Browse mode, when you stop on an item in the Channel Browser, it is highlighted and the TV automatically tunes to the channel or input.
- 2 Press the **EXIT** button to close the Channel Browser.

To tune to a channel or input in Select mode:

- 1 While watching TV, press BACK CB or NEXT CB arrow buttons to display the Channel Browser and surf back to a previous item or surf forward to the next item in the list. In Select mode, when you stop on an item in the Channel Browser, it is highlighted, but the TV is not turned to the channel until you press the ENTER button.
- 2 Press the ENTER button to tune the TV to the highlighted item.
- **3** Press the **EXIT** button to close the Channel Browser.

## Adding and clearing channels and inputs in the History List

As a channel or input is tuned, the Channel Browser adds it to the History List and displays it on the right side of the Channel Browser. Previously tuned channels/inputs are shifted to the left, eventually moving off the left side. Press the **BACK CB** arrow button to surf backward through the previously tuned channels/ inputs. Any channel or input that is tuned repeatedly will not be repeated in the History List, but instead is moved to the end of the list on the right side of the Channel Browser.

- All channels that are tuned using the numeric buttons on the remote control.
- ♦ All channels that are tuned using the ◄/►(arrow) buttons on the remote control.
- **NOTE** Whenever an item is selected that cannot be tuned (for various reasons), the TV will automatically tune to the previously viewed channel or input.

Clearing channels from the History List:

- Reconfiguring the ANT/CABLE input will clear the History List. see "ANT/CABLE IN" on page 45
- Turning off the TV will clear the History List.

### Tuning to the next programmed channel

To tune to the next programmed channel, press the  $\triangleleft/\triangleright$  (arrow) buttons on the remote control or TV control panel.

**NOTE** This feature will not function until you have programmed channels into the TV's channel memory, see "Storing channels in memory (optional)" on page 46

### Tuning to a specific channel (programmed or unprogrammed)

To tune analog channels:

Press the Channel Number (0–9) on the remote control. For example, to select channel 125, press 1, 2, 5, and then press the **ENTER** button.

Tuning digital channels:

Press the Channel Number (0–9) on the remote control, followed by the **(Dash 100)** button, and then the sub-channel number. For example, to select digital channel 125-1, press 1, 2, 5, –, 1, and then press the **ENTER** button.

# **NOTE** If a digital channel is not programmed, either through the automatic channel scan or the Channel add function, see "Auto Tuning" on page 46, you will have to tune the RF channel using the Channel Numbers and the (**Dash 100**) button on the remote control.

## Switching between two channels using Channel Return

The Channel Return feature allows you to switch between two channels without entering an actual channel number each time.

- 1 Select the first channel you want to view.
- 2 Select a second channel using the **Channel Number** buttons (and the (**Dash 100**) button if selecting a digital channel).
- 3 Press the **CH RTN** button on the remote control. The previous channel will display. Each time you press the **CH RTN** button, the TV will switch back and forth between the last two channels that were tuned.

## **NOTE** If you press the **CH RTN** button from a non-antenna input, the TV will return to the last-viewed input.

## Switching between two channels using SurfLock™

The SurfLock<sup>TM</sup> feature temporarily "memorizes" one channel to the **CH RTN** button, so you can return to that channel quickly from any other channel by pressing the **CH RTN** button.

To memorize a channel to the CH RTN button:

- 1 Tune the TV to the channel you wish to program into the CH RTN button.
- 2 Press and hold the **CH RTN** button for a few seconds until the message "Memorized" appears on the screen. The channel has been programmed to the **CH RTN** button.
- 3 You can then change channels repeatedly, and when you press the CH RTN button, the memorized channel will be tuned.

The TV will return to the memorized channel one time only. Once you press the **CH RTN** button and then change channels again, the CH RTN memory will be cleared and the button will function as Channel Return, by switching back and forth between the last two channels that are tuned. This feature also works for external inputs.

## Selecting the picture size

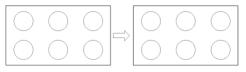
You can view many program formats in several picture sizes— Native, 4:3, Full, TheaterWide 1, TheaterWide 2, TheaterWide 3, Normal, and Dot by Dot.

NOTE	The picture size illustrations are examples only. The format of the image (in any of the picture sizes) depends on the format of the signal you are currently watching. Select the picture size that displays the current program in the way that looks best to you.			
your T To sele 1 Pro	n save separate picture size preferences for each input on V. ct the picture size: ess the <b>PIC SIZE</b> button on the remote. ith the <b>Picture Size</b> menu displayed, do one of the following: Repeatedly press the <b>PIC SIZE</b> button. Press the corresponding number button (0-5) while the <b>Picture Size</b> menu is displayed. Press the ▲/▼ (arrow) buttons while the Picture Size menu is displayed.			
NOTE	Some of the picture sizes may not be available depending on the receiving signal format (those will be grayed out in the Picture Size screen).			
NOTE	Using these functions to change the picture size (i.e., changing the height/width ratio) for any purpose other than your private viewing may be prohibited under the Copyright Laws of the United States and other countries, and may subject you to civil and criminal liability.			
NOTE	If you select a TheaterWide <sup>™</sup> picture size, the top and bottom edges of the picture (including subtitles or captions) may be hidden. To view these edges, adjust the Picture Position or try viewing the program in 4:3 or Full, see '"Scrolling the TheaterWide <sup>™</sup> (TheaterWide 2 and 3 only)" on page 64			

## Full

The Full setting is for viewing in the 16:9 (480i, 480p) source programs. If receiving a squeezed 4:3 format program, the picture is stretched horizontally to fill the width of the screen but not stretched vertically.

The Full setting is for viewing in 1080i, 1080p, and 720p program source.

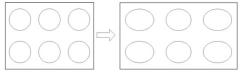


(Sample Illustration) Picture size - Full

The edges of the picture may be hidden.

## TheaterWide 1

This setting is for viewing 4:3 format programs.

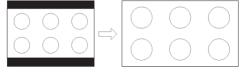


(Sample Illustration) Picture size - TheaterWide 1

The center of the picture remains close to its original proportion, but the left and right edges are stretched horizontally to fill the screen.

## TheaterWide 2

This setting is for viewing letter box programs.

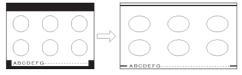


(Sample Illustration) Picture size - TheaterWide 2, letter box

The picture's top and bottom edges may be hidden\*.

## TheaterWide 3

This setting is for viewing letter box programs with subtitles.



(Sample Illustration) Picture size - TheaterWide 3, letter box with subtitles

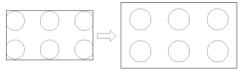
The picture's top and bottom edges are hidden\*.

\* To view the hidden areas (such as subtitles or captions), see "Scrolling the TheaterWide<sup>™</sup> picture (TheaterWide 2 and 3 only)" on page 64.

## Native

NOTE

These settings are for viewing in 480i (HDMI<sup>®</sup>), 480p (HDMI<sup>®</sup>), 720p, 1080i, and 1080p signal programs).

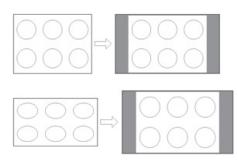


(Sample Illustration) Picture size - Native

- If receiving a 1080i, 1080p, 720p, 480i (HDMI<sup>®</sup>), or 480p (HDMI<sup>®</sup>) signal program, the video is scaled to display the entire picture within the borders of the screen (i.e. no overscanning).
- This is especially useful for external HD sources such as DVD movies, Video Games, or computer graphics.

## The Native mode is supported only for HDMI<sup>®</sup> (1080i, 1080p, 720p, 480i, and 480p), ColorStream<sup>™</sup> (1080i and 720p), and ANT/CABLE (digital) inputs (1080i, 1080p, and 720p).

Depending on the input signal, the picture's border may be hidden, displayed in black, or noisy.

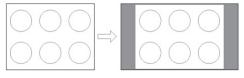


(Sample Illustration) Picture size - 4:3

Some program formats will display with sidebars and/or bars at the top and bottom.

## Normal

This setting is for viewing VGA, SVGA, XGA, WXGA, and SXGA sources.



(Sample Illustration) Picture size - Normal

This size is a non-stretched display. Some input signal formats will display with sidebars and/or bars at the top and bottom.

## Dot by Dot

This setting is for viewing VGA, SVGA, XGA, WXGA, and SXGA sources.



(Sample Illustration) Picture size - Dot by Dot

Dot by Dot is a non-scaling display. Depending on the input signal format (VGA, for example) the picture may appear with sidebars and/or bars at the top and bottom.

## **4:3**

## Scrolling the TheaterWide<sup>™</sup> picture (TheaterWide 2 and 3 only)

You can set separate scroll settings for the TheaterWide 2 and TheaterWide 3 modes for each input.

To set the scroll settings:

- 1 In the **Picture** Menu, highlight **Display Settings**, and then press the **ENTER** button.
- 2 Highlight **Picture Position**, and then press the **ENTER** button. (The **Picture Position** will be available when **Picture Size** is **TheaterWide 2** or **TheaterWide 3**.)

Picture	Position			
Vertic	al Position	0 —	0	_
	Reset		Done	-
	Resei	- 11	Done	

(Sample Image) Picture menu - Theater Settings selection

- 3 The **Picture Position** screen will appear, press ◄/►(arrow) button to scroll the picture up and down as needed.
- To save the new settings, highlight Done, and then press the ENTER button.
   To revert to the factory defaults, highlight Reset and then press the ENTER button.

The adjustment range is from **-5** to **+10**.

**NOTE** When receiving a signal at 480i resolution, the picture scroll function may have limited adjustment range.

## **Using the Auto Aspect feature**

When this feature is set to On, the TV will automatically select the picture size when one of the following input sources is received:

- A 480i, 480p, 720p, 1080i digital signal from the ANT/CABLE input.
- 480i, 480p, 720p, 1080i, 1080p, or VGA (60Hz) signal from the HDMI<sup>®</sup> inputs.

Aspect Ratio of Signal Source	Automatic Aspect Size (automatically selected when Auto Aspect is On)
4:3 Normal	4:3
4:3 Letter Box	TheaterWide 2
16:9 Full	Full
Not defined (no ID-1 data or HDMI® aspect data)	The current picture size you selected, see "Selecting the picture size" on page 60"Selecting the picture size" on page 60.

To turn on the auto aspect ratio feature:

- 1 Press the **MENU** button and open the **Picture** menu.
- 2 Highlight **Display Settings**, and then press the **ENTER** button.
- 3 In the Auto Aspect field, press the ENTER button, and then select On.

To turn off the Auto Aspect ratio feature, Select Off in step 3 above.

## **Using the 4:3 Stretch**

When 4:3 Stretch is activated, the TV displays 4:3 programs as a full-screen picture.

- 1 From the **Picture** menu, highlight **Display Settings**, and then press the **ENTER** button.
- 2 Press the  $\blacktriangle/\lor$  (arrow) buttons to select 4:3 Stretch, and then press the ENTER button.
- 3 Press the  $\blacktriangle/\lor$  (arrow) buttons to select **On** or **Off**, and then press the **ENTER** button

**NOTE** This feature is available when **Auto Aspect** is set to On.

## **Using the FREEZE feature**

To use the FREEZE feature:

- 1 When watching the TV, press the **FREEZE** button to freeze the picture.
- 2 To unfreeze the picture, press the **FREEZE** button again (or any other button).

NOTE	Using the FREEZE function for any purpose other than your private viewing may be prohibited under the Copyright Laws of the United States and other countries, and may subject you to civil and criminal liability.

**NOTE** If the TV is left in FREEZE mode for more than 15 minutes, the FREEZE mode will automatically release and the TV returns to normal video.

## Adjusting the picture

## Selecting the picture mode

You can select your desired picture settings from the modes described below.

Mode:	Description:
Dynamic	Maximizes Contrast, Color Saturation, Sharpness, Gray Scale, and Brightness to create more vivid and dynamic images.
Standard	Standard picture settings.
Movie	Optimized for playing video games by displaying the images in their purest form (4:4:4) without the loss of color information. The result is superior image quality and shorter signal to screen time for a faster gaming experience.
Game	Reduces controller delay for faster video gaming action.
PC	Optimized for viewing your personal computer.

**NOTE** Store Mode is only available if the TV is set to Store Mode at initial setup. This option is hidden in the Home Mode. When the TV is set to **Store** in the initial menu or **Store** in the Installation Menu, the set will always reset to **Store** Picture Mode.

## **NOTE** PC mode is available for HDMI<sup>®</sup> only (grayed out for other input sources).

To select the picture mode using the menu system:

- 1 Press the **MENU** button and open the **Picture** menu.
- 2 Highlight **Picture Mode**, and then press the **ENTER** button.

Picture	< Picture		
	Picture Mode	Standard	Dynamic
Sound	Reset		Standard 🧮
	Backlight	100	Movie
Options	Contrast	100	Game
_	Brightness	0	PC
Installation	Color	0	
	Tint	0	
Timers	Sharpness	0	
-	Advanced Picture Settin	ıg	
Get Help	Display Setting		

(Sample Image) Picture menu - Mode selection

3 Press the  $\blacktriangle/\lor$  (arrow) buttons to select the picture mode you prefer, and then press the ENTER button.

## Adjusting the picture quality

You can adjust the picture quality (Contrast, Backlight, DynaLight<sup>™</sup>, Brightness, Color, Tint, and Sharpness.) to your personal preferences.

Selection	Press (	$Press(\blacktriangleright)$
Backlight*	darker	lighter
Contrast	lower	higher
Brightness	darker	lighter
Color	paler	deeper
Tint	reddish	greenish
Sharpness	softer	sharper

\* Backlight: adjusts the brightness of the entire screen. When in video mode and no signal is input, this selection is automatically set to 0. Settings are stored in memory.

To adjust the picture quality:

- 1 Press the **MENU** button and open the **Picture** menu.
- 2 Press the ▲/▼ (arrow) buttons to select the picture quality you wish to adjust ( Backlight, Contrast, Brightness, Color, Tint, or Sharpness), press the ENTER button. Then press the ◀/▶ (arrow) buttons to adjust the setting.

To reset to the factory defaults:

- **1** Press the **MENU** button.
- 2 Select Picture ► Reset.
- **3** Press the **ENTER** button. A confirmation screen appears.
- 4 Press the  $\blacktriangle/\lor$  (arrow) buttons to select Yes, and then press ENTER.
- **NOTE** Any picture setting that you adjust affect the current input only. You can adjust the picture quality separately for each input. Depending on a Sharpness value, the Edge Enhancer effect may be reduced.

## **Using closed captions**

## **Base closed captions**

Closed caption mode has two options:

- Captions—An onscreen display of the dialogue, narration and sound effects of TV programs and videos that are closed captioned (usually marked "CC" in program guides).
- Text—An onscreen display of information not related to the current program, such as weather or stock data (when provided by individual stations).

To view captions or text:

- 1 In **Options** menu, highlight **Closed Captions**, and then press the **ENTER** button.
- 2 In the Closed Caption Display field, select On.
- 3 In the Analog CC Mode field, select the desired closed caption mode, and then press the ENTER button.

To view captions, highlight CC1, CC2, CC3, or CC4.

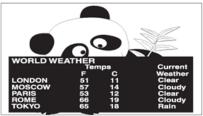
(CC1 displays translation of the primary language in your area.)



(Sample Illustration) Viewing captions

## **NOTE** If the program or video you selected is not closed captioned, no captions will display onscreen.

To view text, highlight T1, T2, T3, or T4.



(Sample Illustration) Captions - text

**NOTE** If text is not available in your area, a black rectangle may appear on screen. If this happens, set the Base CC Mode to **Off**.

To turn off closed caption mode, select **Off** in step 2 above.

### **NOTE** A closed caption signal may not display in the following situations:

- When a recording has been dubbed
- When the signal reception is weak
- When the signal reception is non-standard

## **Digital CC settings**

You can customize the closed caption display characteristics by changing the background color, opacity, text size, type, edge, and color.

NOTE
 These settings are available for digital channels only.
 You cannot set Caption Text and Background as the same color.

To customize closed captions:

1 In **Options** menu, highlight **Closed Captions**, and then press the **ENTER** button.

70	<b>Setting up your TV</b> Adjusting the audio		
	2	Highlight <b>Digital CC Settings</b> , and then press the <b>ENTER</b> button.	
	3	Press the $\blacktriangle/ \bigtriangledown$ (arrow) buttons to highlight the characteristic you wish to change, and then select the format for that characteristic.	
	4	To save the new settings, highlight <b>Done</b> , and then press the <b>ENTER</b> button.	
		To revert to the factory defaults, highlight <b>Reset</b> , and then press the <b>ENTER</b> button.	

Mode:	Description	
Caption Size	Auto, Small, Standard, Large	
Caption Text Type	Auto, Default, Mono (with Serif), Prop. (with Serif), Mono (without Serif), Prop. (without Serif), Casual, Cursive, Small Capitals	
Caption Text Edge	Auto, None, Raised, Depressed, Uniform, Left Drop Shadow, Right Drop shadow	
Caption Text Color	Auto, Black, White, Red, Green, Blue, Yellow, Magenta, Cyan	
Text Foreground Opacity	Auto, Transparent, Translucent, Flashing, Solid	
Background Color	Auto, Black, White, Red, Green, Blue, Yellow, Magenta, Cyan Magenta, Cyan	
Text Background Opacity	Auto, Transparent, Translucent, Flashing, Solid	
Caption Text Edge Color	Auto, Black, White, Red, Green, Blue, Yellow, Magenta, Cyan	

## Adjusting the audio

## Muting the sound

Press the **MUTE** button to partially reduce (1/2 Mute) or turn off (Mute) the sound. Each time you press the **MUTE** button, the mute mode changes in the following order: 1/2 Mute, Mute, Volume, 1/2 Mute, etc.

 $\rightarrow$  1/2 Mute  $\rightarrow$  Mute  $\rightarrow$  Volume  $\rightarrow$ 

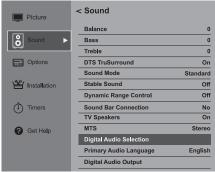
(Sample Image) Levels of mute

## **NOTE** If you modify items in the **Sound** menu while Mute is active, Mute is cancelled.

## **Using the Digital Audio Selection**

You can use the **Digital Audio Selection** to conveniently switch between audio tracks on a digital channel (for those channels that have multiple audio tracks). This temporarily overrides the audio track chosen by the **Primary Audio Language** option under the **Sound** menu, see "Selecting stereo/SAP broadcasts" on page 71

- 1 Press the MENU button and open the Sound menu.
- 2 Highlight **Digital Audio Selection**, and then press the **ENTER** button.



(Sample Image) Sound menu - Digital Audio Selector selection

- 3 Press the  $\triangleleft/\triangleright$  (arrow) buttons to select the desired service.
- 4 Press the **EXIT** button.

## Selecting stereo/SAP broadcasts

The multi-channel TV sound (MTS) feature allows you to output high-fidelity stereo sound. MTS also can transmit a second audio program (SAP) containing a second language, music or other audio information (when provided by individual stations).

When the TV receives a stereo or SAP broadcast, the icon **Stereo** or **SAP** appears when the **INFO** button is pressed. The MTS feature is only available for analog signals on the ANT/CABLE input.

To listen in stereo sound:

- 1 Press the **MENU** button and open the **Sound** menu.
- 2 Highlight MTS, and then press the ENTER button.

#### 3 Select Stereo, and then press the ENTER button.

NOTE

- You can typically leave the TV in Stereo mode because it outputs the type of sound being broadcast (stereo or monaural).
- If the sound is noisy, select Mono to reduce the noise.

To listen to an alternate language on an ATSC digital station (if available), highlight the **Primary Audio Language** field in step 2 above, and then press the  $\blacktriangleleft/\triangleright$  (arrow) buttons to select the language you prefer.

To listen to a second audio program on an analog station, if available, select **SAP** in step 2 above.

NOTE

- A second audio program (SAP) can be heard only on those TV stations that offer it. For example, a station might broadcast another language as a second audio program. If you have SAP on, you will see the current program on the screen but hear the other language instead of the program's normal audio.
- If you have SAP on and the station you are watching is not broadcasting a second audio program, the station's normal audio will be output. However, occasionally there is no sound at all in SAP mode. If this happens, set the MTS feature to Stereo mode.

## Adjusting the audio quality

You can adjust the audio quality by adjusting the bass, treble and balance.

To adjust the audio quality:

- 1 Press the MENU button and open the Sound menu.
- 2 Press the ▲/▼(arrow) buttons to highlight the item you wish to adjust (Bass, Treble, or Balance), and then press the ENTER button.
- 3 Press the  $\triangleleft/\triangleright$  (arrow) buttons to adjust the level.
  - makes the bass or treble weaker or increases the balance in the left channel (depending on the item selected).
  - makes the bass or treble stronger or increases the balance in the right channel (depending on the item selected).

#### **DTS TruSurround™**

This technology delivers an immersive virtual surround sound experience over front facing speaker configurations, complete with rich bass, high frequency detail and clear dialog.

To turn on DTS TruSurround<sup>™</sup>:

- 1 Press the MENU button and open the Sound menu.
- 2 Highlight **DTS TruSurround** field, and then press the **ENTER** button.
- 3 Press the  $\blacktriangle/\lor$  (arrow) buttons to select **On**, and then press the **ENTER** button

#### **Sound Mode**

Select the Sound Mode your prefer.

To select a Sound Mode:

- 1 Press the **MENU** button and open the **Sound** menu.
- 2 Highlight **Sound Mode** field, and then press the **ENTER** button.
- 3 Press the  $\blacktriangle/\lor$  (arrow) buttons to select one of **Sound Mode**, and then press the **ENTER** button.

#### Stable Sound<sup>™</sup>

The Stable Sound<sup>TM</sup> feature limits high volume levels and prevents the extreme changes in volume that can occur when channels are changed or a program switches to a commercial.

To turn on Stable Sound<sup>TM</sup>:

- 1 Press the MENU button and open the Sound menu.
- 2 Highlight **Stable Sound**, and then press the **ENTER** button.
- 3 Press the  $\blacktriangle / \lor$  (arrow) buttons to select **On**.

### Using the Dolby® Digital Dynamic Range Control feature

You can further compress Dolby<sup>®</sup> Digital dynamic range, allowing you to switch from digital to analog broadcasts at the same dynamic range.

To use the Dolby<sup>®</sup> Digital Dynamic Range Control:

- 1 Press the **MENU** button and open the **Sound** menu.
- 2 Highlight **Dynamic Range Control**, and then press the **ENTER** button.
- 3 Press the ▲/▼(arrow) buttons to select On, and then press the ENTER button.

#### 

#### **Sound Bar Connection**

When the Sound Bar is connected to the TV with an optical audio cable:

- 1 Press the MENU button and open the Sound menu.
- 2 Highlight Sound Bar Connection, and then press the ENTER button.
- 3 Press the ▲/▼(arrow) buttons to select **Yes**, and then press the **ENTER** button

## **Selecting the PIN code**

A PIN code is necessary for some menus.

#### Enter a new PIN code

- 1 Press the **MENU** button and open the **Options** menu.
- 2 Highlight **Parental PIN Setup**, and then press the **ENTER** button.
- 3 Use the number buttons to enter a 4-digit number. Confirm the code.

#### **Forgotten PIN code**

While the PIN code entering screen is displayed, press the **INFO** button four times within five seconds. The PIN code will be cleared and you can enter a new PIN code.

#### **Changing or deleting your PIN code**

- 1 Press the **MENU** button and open the **Options** menu.
- 2 Highlight Parental PIN Setup, and then press the ENTER button.
- 3 Use the number button to enter a 4-digit number.
- 4 Select Change PIN or Delete PIN. Press the **ENTER** button.

## Using the input lock feature

You can use the Input Lock feature to lock the video inputs (Video, ColorStream<sup>TM</sup> HD, HDMI 1 and HDMI 2). You will not be able to view the input sources until you unlock the inputs.

To lock/unlock the video inputs:

- 1 In the **Options** menu, highlight the **Parental Control and** Locks, and then press the **ENTER** button.
- 2 Enter your four-digit PIN code.
- 3 Highlight Input Lock, and then press the ENTER button.
- 4 Press the ▲/▼ (arrow) buttons to select the level of video input locking you prefer (see table below for descriptions), and then press the ENTER button.

Mode:	Description:
Video	Locks Video, ColorStream <sup>™</sup> HD, HDMI 1 and HDMI 2.
Off	Unlocks all video inputs.

## **Locking channels**

With the Lock feature, you can lock specific channels. Locked channels can only be accessed by entering the PIN code, see "Enter a new PIN code" on page 74

To lock channels:

1 From the **Options** menu, highlight **Channel Options**, and then press the **ENTER** button.

Channel O	otions			
Ch.	Туре	-@+	8	
5	ATV			•
6	ATV			
7	ATV			
8	ATV			
9	ATV			
10	ATV			
11	ATV			
12	ATV			
				•

#### (Sample Illustration) Channel options

2 Press the ▲/▼(arrow) buttons to select a channel in the lock column.

3 Press the ENTER button. PIN code entry will be required to set a locked channel.

#### **NOTE** If the PIN code has not yet been set, a warning message appears.

- 4 A check appears in the box.
- 5 To remove the check, press the ENTER button.
- 6 Press the **EXIT** button.

#### Using the GameTimer™

You can use the GameTimer<sup>™</sup> to set a time limit for playing a video game (30–120 minutes). When the GameTimer<sup>™</sup> expires, the TV enters Input Lock mode and locks out the input source for the video game device.

To set the GameTimer<sup>TM</sup>:

- 1 In the **Timers** menu, highlight **GameTimer**, and then press the **ENTER** button.
- 2 Enter your four-digit PIN code.
- 3 Press the  $\bigvee$  (arrow) button to select 30, 60, 90 or 120 minutes, and then press the ENTER button.

To cancel the GameTimer<sup>®</sup>, select **Off** in step 3 above.

To deactivate the Input Lock once the GameTimer® has activated it:

- Set the Input Lock to Off, see "Using the input lock feature" on page 75.
- **NOTE** A message appears when 10 minutes, 3 minutes, and 1 minute are remaining.
  - If the TV loses power with time remaining, the TV will enter Input Lock mode when power is restored (as if the GameTimer had been activated). To resume use, you must deactivate the Input Lock, see "Using the input lock feature" on page 75.

#### Using the panel lock feature

You can lock the control panel to prevent your settings from being changed accidentally (by children, for example). When Panel Lock

is set to **On**, none of the controls on the control panel operate except the **POWER** button.

To lock the control panel:

- 1 In the **Options** menu, highlight **Panel Lock**, and then press the **ENTER** button.
- 2 Enter your four-digit PIN code.
- 3 Press the  $\mathbf{\nabla}(\operatorname{arrow})$  button to select **On**.

When the control panel is locked and any button on the control panel (except the **POWER** button) is pressed, the message "NOT AVAILABLE" appears.

Picture	< Options		
_	Channel Options		
Sound	Closed Captions		
	MediaShare Setup		
Options	HDMI CEC Control Setup		
	HDMI CEC Player Control		
Installation	Input Options		
_	Channel Browser Setup		
(I) Timers	Power Management		
Ŭ	Panel Lock	Off	On
🕜 Get Help	HDMI Information Display	Off	Off
	Parental PIN Setup		
	Parental Control and Locks		

#### (Sample Illustration) Locks menu - Panel Lock selection

To unlock the control panel, select **Off** in Step 3 in this section or press and hold the **VOLUME** (–) button on the TV control panel for approximately 15 seconds until the volume icon appears.

## **Using the Media Player**

#### Using Media Player with a USB device

You can enjoy photo or music content stored on a USB storage device.

Photo Viewer specifications:

- Data type: JPEG EXIF ver 2.1
- File format: JPEG
- Maximum photo size: 6 MB
- Maximum number of files: 500/folder
- Maximum photo resolution: 4096 x 4096 pixels

Music Player specifications:

- File format: MP3
- Sampling frequency: 32 kHz, 44.1 kHz, 48 kHz

Bit rate: from 32 to 320 kbps

Maximum number of files: 500/folder

Supported file system: FAT16 and FAT32

#### **NOTE** Gently insert the USB device into the port and do not remove while viewing Media Player.

- USB device: USB Mass Storage Class device (MSC)
- Connectivity is not guaranteed for all devices.
- Connect the USB device to the TV directly.
- Do not use a USB Hub.
- You must obtain any required permission from copyright owners to use copyright content. Toshiba cannot and does not grant such permission.
- Depending on the file size and amount in your USB storage device, it may take some time to load before content is viewable. A message will display on-screen when files are loading from the USB storage device.
- Only limited types of U3 USB device are supported. Therefore, it is suggested that you not use U3 USB with Media Player.
- Non-supported characters will be replaced with a square.

#### **Auto Start function**

When Auto Start is enabled, you will be asked if you want to start the Media Player when a USB device is inserted. If Auto Start is disabled, you must manually start the Media Player from the menu. To change the Auto Start setting:

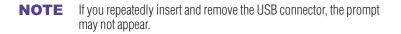
- 1 In the **Options** menu, highlight **MediaShare Setup**, and then press the **ENTER** button.
- 2 Press the  $\blacktriangle/\forall$  (arrow) buttons to highlight USB Auto Start.
- 3 Press the  $\triangleleft/\triangleright$  (arrow) buttons to select **On** or **Off**.

#### To open the Media Player

There are two methods for starting the Media Player: auto start and manual start.

Auto Start:

1 Gently insert a supported USB storage device to the USB port on the back of the TV. A prompt will appear.



2 Press the ◀/►(arrow) buttons to select Yes, and then press the ENTER button.

The Media Player menu appears. If you select **No**, nothing happens.

USB device v MediaShare?		to TV. Do you wa	ant to open
	No	Yes	

(Sample Image) Media Player - open screen

**NOTE •** The prompt will disappear after about 10 sec.

If Auto Start is set to Off, you can start the Media Player manually.

Manual Start:

- 1 In the **Options** menu, highlight **MediaShare Setup**, and then press the **ENTER** button.
- 2 Press the  $\blacktriangle/ \lor$  (arrow) buttons to highlight **Photo** or **Music**, and then press the **ENTER** button.

MediaShare Setup	
USB Auto Start	On
Photo	
Music	

(Sample Image) Media Play screen

**NOTE \diamond** The viewer will open even if there are no photo or music files.

While the Media Player is active, the main menus cannot be displayed.

#### **Viewing photo files**

There are three types of view modes: multi view, single view, and slide show. Within Slide show, you can skip forward, repeat, and set time interval.

#### **Multi View**

This view allows you to search for photos in a grid format. These pictures are displayed using thumbnail data in each image file.



#### (Sample Image) Media Play - photos screen

To use multi view:

- Press the ▲/▼/◀/► (arrow) buttons to move the highlight in one window. If all of the photos will not fit in one screen, the screen will move to the previous page when you press ◄ from the top left thumbnail. When you press ► from the bottom right thumbnail, the screen will move to the next page. You can also use the ▲/▼ (arrow) buttons to page up or down the photo list when there are more photos than will fit on one screen.
- 2 When you select a folder, press the ENTER button to move to the next layer, or press the CH RTN button to return to the previous layer.
- 3 Press the ENTER button to view the selected photo in Single View mode.

#### **Single view**

In this view mode, only files located in the selected directory will be displayed. This view allows you to change the photo content manually. When you move from Multi View to the Single View, the currently selected photo is displayed.

To use single view:

- ♦ Press the ► (arrow) button to view the next photo. Press ◄ to view the previous photo.
- ♦ Press ▲ to rotate the image 90° counterclockwise. Press ▼ to rotate the image 90° clockwise.

#### **Slide show**

This view allows you to watch a slide show of the photos. In this mode, only files located in the selected directory will be played. To use slide show:

- 1 Press the ENTER button in the Single View mode.
- 2 Press the ◄/► (arrow) buttons to view the previous or next photo.

To set Interval Time and Repeat settings:

- 1 Press the MENU button to open the Quick Menu.
- 2 Press the  $\blacktriangle/ \bigtriangledown$  (arrow) buttons to select either Interval Time or Repeat.
- 3 Press the ◀/► (arrow) buttons to adjust the setting and press the CH RTN button.

**NOTE** Zoom and Picture size functions are disabled.

To close the Photo Viewer, press the **EXIT** button. The television will return to the last viewed channel or external input.

#### **Playing music files**

You can listen to music from a list of available files. When listening to music files, you can select music lists, play, pause, stop, skip, repeat play, and adjust sound settings.

/USB/MoveToHere/Music/	Total Time	
01. You and Me-mp3	03:37	•
02. Feel The Earth Move.mp3	03:53	8/4
03. Have I Told You Lately.mp3	04:20	
04. Never Can Say Goodbye mp3	04:53	
05. Here, There and Everywhere.mp3	02:20	· (_')
06. Bittersweet.mp	04:37	
07. Can't Go For That (No Can Do).mp3	04:39	
08. Ain't No Sunshine.mp3	03:18	
09. Luka.mp3	03:36	Artist
01 - Claudia's Theme mp3	04:12	Album
02 - Gymnopedies1.mp3	02:36	
03 Canon in D.mp3	06:11	Stop
04 - Nap In The Dunes.mp3	02:50	00:00:00 / 00:00:00
05 - Riding The Waves.mp3	03:24	

#### (Sample Image) Media Play - music list

 After opening Media Player and selecting Music (see "To open the Media Player" on page 78"To open the Media Player" on page 78) press the ▲/▼ (arrow) buttons to select a file or folder. You can use the ▲/▼ (arrow) buttons to page up or down the music list when there are more files than will fit onto one screen.

$\mathbf{O}$		<mark>ng up your TV</mark> g the Media Player
		Select the desired folder and press the <b>ENTER</b> button to move to the next layer. Press the <b>CH RTN</b> button to move back to the previous layer.
	3	With the desired file selected, press the <b>ENTER</b> button or the <b>PLAY</b> button to start playback.
		Press the <b>STOP</b> button to stop playback
NO	TE	<ul> <li>If playback finishes before STOP is pressed, the next file will automatically start to play from the beginning.</li> <li>Depending on the file size, it may take some time for playback to begin.</li> </ul>
	Duri	ing playback you can do the following:
		Press <b>PAUSE</b> to pause.
	*	To resume normal playback, press PLAY.
		To locate a specific file, press the <b>SKIP Reverse</b> or <b>SKIP</b> <b>Forward</b> button repeatedly.
	*	To adjust volume, press the <b>VOL</b> (+ –) buttons.
NO	TE	To play in fast reverse or fast forward, press <b>REV</b> or <b>FF</b> during playback. Each time you press <b>REV</b> or <b>FF</b> , the playback speed changes.
NO	TE	During playback, you can adjust the <b>Sound</b> menu functions from the Quick Menu.
	To s	et the repeat mode:
		Press the <b>MENU</b> button to open the <b>Quick Menu</b> .
		Press the $\blacktriangle/\lor$ (arrow) buttons to select <b>Repeat</b> .

- 3 Press the  $\triangleleft/\triangleright$  (arrow) buttons to select Off, All or 1.
- 4 Press CH RTN.

To close the Music Player, press EXIT.

#### Viewing photo files and playing music files at the same time

While viewing photo files, you can listen to music from a list of available files.

- 1 While viewing photos in the **Single View** or **Slide Show** mode, press the **MENU** button to open the **Quick Menu**.
- 2 Highlight **Background Music** and press the **ENTER** button. The music list appears.

- 3 Select a music file and press the **ENTER** button to start playback.
- 4 Press **CH RTN** twice to move back to photo view mode. The music is now playing in the background.

#### Sorting photo or music files

From the photos Multi View or from the music list, you can sort your photo or music folders and files.

To sort photo or music folders and files:

- 1 From photo Multi View mode or from the music list, press the **MENU** button to open the **Quick Menu**.
- 2 Press the  $\blacktriangle/ \bigtriangledown$  (arrow) buttons to select **Sort**.
- 3 Press the ◄/►(arrow) buttons to select **Title**, **New**, or **Old** to set the sorting rule.

Title-File sorting rules:

- Unicode priority
- Numerical (0-9), Uppercase (A-Z), lowercase (a-z), Chinese
- Increasing order

**New-**From new to old according to the date and time when the picture was taken.

**Old-**From old to new according to the date and time when the picture was taken.

- **NOTE** During playback, you can adjust the **Sound** menu functions from the Quick Menu.
- **NOTE** The Sorting or Total Time display may not be available in all cases.

## Setting the sleep timer

You can set the sleep timer to turn off the TV after a set length of time (maximum of 12 hours).

To set the sleep timer using the remote control:

- 1 Press the **SLEEP** button on the remote control to set the length of time until the TV turns off.
- 2 Repeatedly press the SLEEP button to increase the time in 10-minute increments, or press the  $\blacktriangle/\lor$  (arrow) buttons to

increase or decrease the time in 10-minute increments, to a maximum of 12 hours.

To set the sleep timer using the on-screen menus:

- 1 In **Timers** menu, highlight **Sleep Timer**, and then press the **ENTER** button.
- 2 Press the Number buttons to enter the length of time (maximum of 12 hours) and then press the ENTER button. Or press the ▲/▼ (arrow) buttons to increase or decrease in 10-minute increments (maximum of 12 hours).

**NOTE** If a power failure occurs, the sleep timer setting may be cleared.

To display the time remaining until the TV turns off, press the **SLEEP** button.

To cancel the sleep timer, repeatedly press **SLEEP** until it is set to 0 minutes.

### **No Signal Power Down**

The TV will automatically turn itself off after 15 minutes when no signal is detected. You can change the setting to Off for the following purposes:

- Low signal strength of analog channel (no signal detection)
- Only Audio L/R is connected to external input to listen to music through the TV speakers.

To change the no signal power down setting:

- 1 From the **Options** menu, highlight **Power Management**, and then press the **ENTER** button.
- 2 Highlight No Signal Power Down, and then press the ENTER button.
- 3 Press the ▲/▼(arrow) buttons to highlight the item you want to change, and press the ◄/► (arrow) buttons to select On or Off.

**NOTE \diamond** Default setting for this feature is **On**.

A warning message will appear 1 minute before the TV turns off.

## **Using HDMI® CEC**

This is a new feature that uses CEC technology and allows you to control Toshiba HDMI<sup>®</sup> CEC compatible devices from the TV remote via HDMI<sup>®</sup> (see "HDMI® CEC connection" on page 30)

When **Enable HDMI CEC Control** in the **HDMI CEC Control Setup** menu is set to **On** (see "Setting up HDMI® CEC" on page 87), the HDMI<sup>®</sup> CEC functions described below will be enabled.

## HDMI® CEC playback device (Blu-ray™/DVD player, etc.) control

With your TV's remote control, or using the HDMI<sup>®</sup> CEC Player Control menu, you can control the connected HDMI<sup>®</sup> CEC playback device you are watching.

Button:	Description:
PLAY	Begin playback
STOP	Stop playback
PAUSE	Pause the picture during play or record mode
SKIP Forward	Skip Forward
SKIP Reverse	Skip backward
FF	Fast forward
REW	Rewind/reverse
A/V/A/P	Navigates menu options
ENTER	Enters menu options
EXIT	Return to the previous menu

#### Available remote control key functions

**NOTE** These functions depend on the devices connected.

### HDMI® CEC Player Control menu functions

To control the HDMI<sup>®</sup> CEC player from the menu:

1 From the **Options** menu, highlight **HDMI CEC Player Control**, and then press the **ENTER** button.

Picture	< Options	
-	Channel Options	
Sound	Closed Captions	
	MediaShare Setup	
Dotions	HDMI CEC Control Setup	
	HDMI CEC Player Control	
「 <sup>●</sup> 」 Installation	Input Options	
_	Channel Browser Setup	
( Timers	Power Management	
0	Panel Lock	Off
🕜 Get Help	HDMI Information Display	Off
	Parental PIN Setup	
	Parental Control and Locks	

#### (Sample Image) Preferences menu - HDMI® CEC Player Control

2 Press the  $\blacktriangle/\lor$  (arrow) buttons to select the item you wish to control and press the ENTER button.

Item:	Description:
Power	Turns the select device On/Off
Root Menu	Accesses the root menu of the selected device
Contents Menu	Accesses the contents list when you press <b>ENTER</b> . At this time, the HDMI CEC Player Control menu disappears.
Setup Menu	Accesses the setup menu of a selected device
Top Menu	Accesses the top menu of a selected device
Menu	Accesses the menu of a selected device

**NOTE** These functions depend on the devices that are connected. The HDMI<sup>®</sup> CEC Player Control item will be grayed out in the following conditions:

- A non-HDMI<sup>®</sup> input is currently selected.
- The Enable HDMI CEC item is set to Off.
- The connected CEC device is not a playback or recording device.

#### HDMI® CEC input source selection

If an HDMI<sup>®</sup> CEC device with HDMI<sup>®</sup> switching capability (e.g. Audio Receiver) is connected to the HDMI<sup>®</sup> input, you can select another HDMI<sup>®</sup> CEC device that is connected to the master HDMI<sup>®</sup> device using the TV's **INPUT** button, see "Selecting the video input source" on page 51

#### **VOLUME and MUTE controls of Audio Receiver**

With your TV's remote control, you can adjust or mute the sound volume of the Audio Receiver.

♦ VOL (+ –) buttons adjust the volume level.

**MUTE** button turns off the sound.

To use this function:

- Set Initial Speaker Setting to Receiver in the HDMI CEC Control Setup menu.
- Confirm that a connected HDMI<sup>®</sup> CEC device (such as DVD player, etc.) is selected for the Audio Receiver input source.

NOTE	These functions depend on the device connected.
	Initial Speaker Setting will be grayed out if Amplifier Control is set

## to Off.

#### **Other HDMI® CEC functions**

When the **Enable HDMI CEC Control** and each item in the **HDMI CEC Control Setup** menu are set to **On**, the following functions will be enabled.

Item:	Description:
TV Auto Power	If an HDMI® CEC device is turned on, the TV turns on automatically.
Auto Standby	If the TV is turned off, the TV will send a message to turn off all of the HDMI® CEC devices connected to the TV.
Amplifier Control	If Amplifier Control is set to On, you can adjust the sound volume or turn off the sound using the remote control.
Initial Speaker Setting	From this item, you can set your audio output preference to the TV speakers or the audio receiver speakers. When this item is set to Receiver, the TV remote can be used to adjust or mute the volume of the audio. This item will be grayed out when Amplifier Control is set to Off.

**NOTE** When you turn on the Audio Receiver, change its input source or adjust the sound volume, the sound will be output from the audio receiver's speakers even if TV Speakers has been selected. Turn the TV off and on again to output the sound from the TV speakers.

#### **Setting up HDMI® CEC**

To set the HDMI® CEC Setup:

1 From the **Options** menu, highlight **HDMI CEC Control Setup** and press the **ENTER** button.

- 2 Highlight Enable HDMI CEC Control, and then press the ENTER button.
- 3 Select **On**, and then press the **ENTER** button.

## **NOTE** If you select **Enable HDMI CEC Control** Off, the other items will be grayed out.

4 Press the ▲/▼ (arrow) buttons to highlight the HDMI<sup>®</sup> CEC Setup item you want to use, and press the ENTER button, follow by ▲/▼ (arrow) buttons.

- TV Auto Power: On/Off
- Auto Standby: On/Off
- Amplifier Control: On/Off
- Initial Speaker Setting: TV/ Receiver

## Using the HDMI® settings feature

## HDMI® 1(or 2) RGB Range

You can select RGB range of HDMI inputs from the following modes, as described below:

- 1 From the **Options** menu, highlight **Input Options**, and then press the **ENTER** button.
- 2 Highlight HDMI 1(or 2) RGB Range and then press the ENTER button.
- 3 Press the  $\blacktriangle/\lor$  (arrow) buttons to select Auto, Full, or Limited, and then press the ENTER button.

Mode	Description
Auto(default)	Adjusts RGB full range signal automatically.
Full	RGB input signal is displayed in the range from 0 to 255.
Limited	RGB input signal is displayed in the range from 16 to 235.

The HDMI<sup>®</sup> setting (RGB Range) needs proper HDMI<sup>™</sup> source devices. If your HDMI<sup>®</sup> source device does not support these features, the TV may not work properly when this feature is enabled.

#### **HDMI® Information Display**

Viewing the HDMI® signal information:

1 From the **Options** menu, highlight **HDMI Information Display**, and then press the **ENTER** button.

- 2 Press the  $\blacktriangle/\lor$  (arrow) buttons to select **On** or **Off**, and then press the **ENTER** button.
- 3 When the HDMI Information is set to On, pressing the INFO button displays the HDMI Information banner (Resolution, Scan Type, Frame Rate, Aspect, Bit Depth, Color Space, RGB/YUV, Chroma Format). When the HDMI Information is set to Off, the normal banner is displayed.

#### NOTE The signal information banner will appear when this feature is set to **On** and you watch an HDMI<sup>®</sup> input and press the **INFO** button. The signal information will disappear after approximately 60 seconds.

If you press the INFO button when this feature is set to Off, only the normal banner will appear.

## **Displaying TV status information**

To display TV status information using the **RECALL** button:

Press the **RECALL** button on the remote control.

The following information will be displayed (if applicable):

- Current input (ANT/CABLE, Video, etc.)
- If ANT/CABLE is the current input, either "CABLE" (for cable TV) or "ANT" (for over-the-air broadcasts).
- Channel number (if in ANT/CABLE mode)
- Digital signal strength indicator (bar graph in lower right corner of box; for digital signals only)
- Stereo, Mono, or SAP audio status (when in HDMI<sup>®</sup> input mode, Dolby<sup>®</sup> Digital, or PCM)
- Video resolution
- Aspect ratio of incoming video signal (4:3 or 16:9)
- V-Chip rating status
- GameTimer (if set)

To close the Recall screen, press the **RECALL** button again.

To display TV status information using INFO, press the **INFO** button.

The following additional information will display for digital channels, if applicable:

Title

- Duration
- Detailed description

lφ	ANT	69-1	ABCD			12	720p	16:9	TV-PG		
MD	Ø										
		Al at	v The	4000	Ohann	_	_	_	05-00-		TOT.
		No	V The	ABCD	Show				05:00p	m-06:00p	mESI
		Nex	d ABC	D New	at 5:0	0pm			08:	00pm-09:	00pm

#### (Sample Illustration) Info banner

To close the INFO screen, press the INFO button again.

## Understanding the last mode memory feature

If the power is cut off while you are viewing the TV, the Last Mode Memory feature automatically turns on the TV when the power is resupplied.

**NOTE** If you know you will be away from the TV for an extended period of time you should unplug the power cord.

## **Chapter 7**

# Using the TV's Advanced Features

## Using the advanced picture settings

### **ColorMaster™**

The ColorMaster<sup>™</sup> feature allows you to adjust standard colors.

- 1 From the **Picture** menu, highlight **Advanced Picture Settings**, and then press the **ENTER** button.
- 2 Highlight ColorMaster, and then press the ENTER button.
- 3 Press the ▲/▼(arrow) buttons to select On, and then press the ENTER button.

#### **Base Color Adjustment**

When **ColorMaster<sup>TM</sup>** is set to **On**, the list of base colors appears. You can select a base color to adjust.

- 1 From the **Picture** menu, highlight **Advanced Picture Settings**, and then press the **ENTER** button.
- 2 Highlight **Base Color Adjustment** and then press the **ENTER** button.
- 3 Press the ▲/▼(arrow) buttons to select a color. Press the ENTER button.
- 4 Press the ◄/►(arrow) buttons to select Hue, Saturation, or Brightness.
- 5 Press the  $\blacktriangle/ \lor$  (arrow) buttons to adjust the setting.

6 Repeat Steps 3 through 5 to adjust other colors.To reset the adjustments to the factory defaults, select **Reset** on the screen. Press the **ENTER** button.

#### **Color Temperature**

You can change the quality of the picture by selecting from three preset Color Temperatures (Cool, Medium, and Warm), as described below.

Mode:	Picture Quality:
Cool	blueish
Medium	neutral
Warm	reddish

- 1 From the **Picture** menu, highlight **Advanced Picture Settings**, and then press the **ENTER** button.
- 2 Highlight Color Temperature and then press the ENTER button.
- 3 Press the ENTER button, follow by ▲/▼(arrow) buttons to select the desired color temperature, and then press the ENTER button.
- Press the ▲/▼ (arrow) buttons to highlight Red, Green, or Blue level, and then press the ◄/► (arrow) buttons to adjust the level. Press the EXIT button.
- **NOTE** The Red, Green, and Blue level settings are connected to the Color Temperature settings and will change based on which preset color temperature (Cool, Medium, or Warm) is selected.

#### Static Gamma

The static gamma feature lets you adjust the levels of black in the picture.

- 1 From the **Picture** menu, highlight **Advanced Picture Settings**, and then press the **ENTER** button.
- 2 Highlight Static Gamma and then press the ENTER button.
- 3 Press the ◀/► (arrow) buttons to adjust the level of black detail. Press the EXIT button.
  - If the setting is decreased, the detail of black colors is decreased.
  - If the setting is increased, the detail of black colors is increased.

#### **DynaLight**<sup>™</sup>

The DynaLight<sup>TM</sup> feature automatically strengthens the black coloring of dark areas in the video according to the level of darkness.

- 1 From the **Picture** menu, highlight **Advanced Picture Settings**, and then press the **ENTER** button.
- 2 Highlight **DynaLight** and then press the **ENTER** button.
- 3 Press the  $\blacktriangle/\lor$  (arrow) buttons to select **High**, **Low**, or **Off**. Press the **ENTER** button.

#### **Dynamic Contrast**

Dynamic Contrast detects changes in picture quality that affect the appearance of your contrast settings and then automatically adjusts the video.

- 1 From the **Picture** menu, highlight **Advanced Picture Settings**, and then press the **ENTER** button.
- 2 Highlight **Dynamic Contrast** and then press the **ENTER** button.
- 3 Press the ▲/▼(arrow) buttons to select **High**, **Middle**, **Low**, or **Off.** Press the **ENTER** button.

### **Cinema Mode**

When you view a DVD (3:2 pulldown processed) from a DVD player connected to the VIDEO, ColorStream<sup>TM</sup> HD (component video), or HDMI<sup>®</sup> inputs on the TV, smoother motion can be obtained by setting the Cinema Mode to **On**. (Available for 480i and 1080i signals).

- 1 From the **Picture** menu, highlight **Advanced Picture Settings**, and then press the **ENTER** button.
- 2 Highlight Cinema Mode and then press the ENTER button.
- 3 Press the ▲/▼ (arrow) buttons to select On or Off. Press the ENTER button.

## **Noise Reduction**

### **MPEG NR**

The MPEG noise reduction feature allows you to reduce visible interference caused by MPEG compression.

- 1 From the **Picture** menu, highlight **Advanced Picture Settings**, and then press the **ENTER** button.
- 2 Highlight Noise Reduction and then press the ENTER button.
- 3 Press the  $\blacktriangle/\lor$  (arrow) buttons to select MPEG NR and then press the ENTER button.
- 4 Press the  $\blacktriangle/\lor$  (arrow) buttons to select **High**, **Middle**, **Low**, or **Off**, and then press the **ENTER** button.

### DNR

DNR lets you soften the screen representation of a weak signal to reduce the noise effect.

- 1 From the **Picture** menu, highlight **Advanced Picture Settings**, and then press the **ENTER** button.
- 2 Highlight Noise Reduction and then press the ENTER button.
- 3 Press the  $\blacktriangle/\lor$  (arrow) buttons to select **DNR** and then press the **ENTER** button.
- 4 Press the  $\blacktriangle/\lor$  (arrow) buttons to select High, Middle, Low, or Off, and then press the ENTER button.

## **Edge Enhancer**

The Edge Enhancer feature lets you adjust the levels for your desired picture settings and achieve a sharper picture.

- 1 From the **Picture** menu, highlight **Advanced Picture Settings**, and then press the **ENTER** button.
- 2 Highlight Edge Enhancer and then press the ENTER button.
- 3 Press the ▲/▼ (arrow) buttons to select On or Off. Press the ENTER button.
- **NOTE** This feature may not work properly depending on the content.

## **Chapter 8**

## Troubleshooting

## **General troubleshooting**

Before calling a service technician, review this chapter or visit the Toshiba technical support Web site at support.toshiba.ca (for L1460UC model) for possible causes/solutions for the problem you are experiencing.

Before you begin to troubleshoot any problem, first unplug the TV from the AC wall outlet, wait approximately one minute, and then plug the TV back into the AC wall outlet. If the problem still exists attempt to troubleshoot the problem.

#### Black box on-screen.

The closed caption feature is set to one of the Text modes (T1, T2, T3, or T4). Set the closed caption feature to Off, see "Using closed captions" on page 68.

#### TV stops responding to controls.

If the TV stops responding to the buttons on the remote control or TV control panel and you cannot turn off the TV, unplug the TV from the AC wall outlet and plug it back in.

If you cause a static discharge when touching the TV and the TV fails to function, simply unplug the TV from the AC outlet and plug it back in. The TV should return to normal operation.

#### Other problems.

If your TV's problem is not addressed in this Troubleshooting section or the recommended solution has not worked, use the Reset

Factory Defaults procedure, see "Resetting Factory Defaults" on page 50.

#### **Onscreen Demo Pop-up**

If your TV is displaying a Demo pop-up screen, reset the Store / Home mode setting to Home. For more information see "Installation setup selection" on page 45.

#### TV will not turn on.

Ensure the power cord is plugged in properly, and then press the **POWER** button. Ensure the TV is plugged into a working AC power outlet by plugging another device into the AC power outlet to verify the AC power outlet is working.

Replace the batteries in the remote control, see "Installing batteries" on page 35.

Try the control panel buttons on the TV.

### **Picture problems**

#### General picture problems.

Check the antenna/cable connections, see "Connecting Your TV" on page 23.

Press the **INPUT** button on the remote control or on the TV and select a valid video input source, see "Selecting the video input source" on page 51. If no device is connected to an input on the TV, no picture appears when you select that particular input source. For device connection details, see "Connecting Your TV" on page 23.

Antenna reception may be poor. Use a highly directional outdoor antenna (if applicable).

The station may be having broadcast difficulties. Try another channel.

Adjust the picture quality, see "Using the advanced picture settings" on page 91.

## Picture size changes by itself or when the TV is turned OFF and back ON.

Turn the Auto Aspect feature of the TV to OFF. see "Using the advanced picture settings" on page 91.

#### Cannot select external video sources.

If you cannot view signals from external devices connected to VIDEO, ColorStream<sup>TM</sup> HD, HDMI 1, or HDMI 2, ensure that the Input Lock is set to Off, see "Using the input lock feature" on page 75.

#### Noisy picture.

If you are watching an analog channel (off-air broadcast or Cable TV), you can set the DNR feature to reduce visible interference in the TV picture, see "DNR" on page 94.

#### Video Input Selection problems

If the Input Selection window does not appear when you press **INPUT** on the remote control or TV, press **INPUT** a second time. This will cause a change to the next video input source and display the Input Selection window.

#### Poor display color or no color.

The station may be having broadcast difficulties. Try another channel.

Adjust the Tint and/or Color, see "Adjusting the picture quality" on page 67.

#### Poor composite picture.

If the TV is connected to an external A/V device (e.g. DVD player, video game system, set-top box, etc.) try using a ColorStream<sup>TM</sup> or HDMI<sup>®</sup> video connection instead.

#### Picture and sound are out of sync.

As with all products that contain a digital display, this may occur in rare instances, when viewing certain content (e.g. television broadcasts, video games, DVDs). The cause may include, without limitation, video processing within the TV, video processing in an attached gaming system, and video processing or different compression rates used by broadcasters in their programming.

Try the following:

- If the TV is connected to an A/V receiver that has a programmable audio delay feature, use this feature to help synchronize the sound to the picture.
- If the problem occurs only on certain TV channels, inform your local broadcast, cable, or satellite provider.
- Turn off and unplug the TV from the AC wall outlet for a few seconds and plug it back in.

## **Sound problems**

Check the antenna/cable connections, see "Connecting a VCR, antenna, cable TV, or camcorder" on page 25.

The station may be having broadcast difficulties. Try another channel.

The sound may be muted. Press the VOL (+) button.

If you hear no sound, try setting the MTS feature to Stereo mode, see "Selecting stereo/SAP broadcasts" on page 71.

If you are not receiving a second audio program from a known SAP source, make sure the MTS feature is set to SAP mode, see "Selecting stereo/SAP broadcasts" on page 71.

If you hear audio that seems incorrect for the program you are watching (such as music or a foreign language), the SAP mode may be on. Set the MTS feature to Stereo mode, see "Selecting stereo/SAP broadcasts" on page 71.

### **Remote control problems**

Remove all obstructions between the remote control and the TV.

Replace the remote control's batteries, see "Installing batteries" on page 35.

Your TV's remote control may not operate certain features on your external devices. Refer to the User's Guide for your other device to determine its available features. If your TV remote control does not operate a specific feature on another device, use the remote control that came with the device, see "Learning about the remote control" on page 38.

If the TV still does not act as expected, perform the Reset Factory Defaults procedure, see "Resetting Factory Defaults" on page 50.

### **Channel tuning problems**

The Auto Tuning feature may have erased the channel from memory. Add the channel to the channel memory, see "Storing channels in memory (optional)" on page 46.

The Lock feature may have blocked the channel. Unblock the channel, see "Locking channels" on page 75.

If you cannot tune digital channels, check the antenna configuration. If the problem persists, clear all channels from the channel list and reprogram channels into memory, see "Storing channels in memory (optional)" on page 46. For additional information, see "TV stops responding to controls." on page 95. If the problem persists, use the Reset Factory Defaults procedure, see "Resetting Factory Defaults" on page 50.

### **Closed caption problems**

If the program or video you have selected is not closed captioned, no captions appear on the screen. If text is not available, a black rectangle may appear.

If this happens, turn off the closed caption feature, see "Using closed captions" on page 68.

A closed caption signal may not display correctly under the following circumstances:

- The recording is dubbed
- The signal reception is weak
- The signal reception is non-standard

For additional information, see "Using closed captions" on page 68.

## **No HDMI® CEC operation**

The HDMI  $^{\mbox{\tiny \$}}$  CEC feature is available for Toshiba HDMI  $^{\mbox{\tiny \$}}$  CEC compatible devices.

Ensure that HDMI<sup>®</sup> cables with the (HDMI<sup>®</sup>) Logo are used.

When the connected HDMI<sup>®</sup> CEC device does not work correctly after you have changed settings of the device, turn off your TV and unplug the power cord, then plug in and turn on again.

If several devices are connected, the HDMI<sup>®</sup> CEC feature may not operate properly.

Read the instruction manual provided with the connected  $HDMI^{\circledast}$  CEC device.

## **HDMI®** problems

#### HDMI® cables.

Ensure that HDMI<sup>®</sup> cables with the (HDMI<sup>®</sup>) Logo are used, see "Connecting an HDMI<sup>®</sup> or DVI device to the HDMI<sup>®</sup> input" on page 28.

#### Legacy HDMI® sources.

Some legacy HDMI  $^{\mbox{\tiny \$}}$  sources may not work properly with the latest HDMI  $^{\mbox{\tiny \$}}$  TV products due to new standard adoption.

## **Media Player problems**

Incorrect functionality may occur when using a USB HUB connection.

Photo files that were processed and edited using the computer's application software may not be viewable.

The TV may select one format automatically and play it when contents that support two or more formats are played.

Confirm that the contents of the USB storage device are in formats that are supported by this TV, see "Using the Media Player" on page 77.

## If the problem persists after trying the solutions

Contact Toshiba at: support.toshiba.ca



## **Specifications**

#### **NOTE** • These models comply with the specifications listed below.

- Designs and specifications are subject to change without notice.
- These models may not be compatible with features and/or specifications that may be added in the future.

## **Television system**

NTSC standard	
ATSC standard	8VSB
Digital Cable	64 QAM, 256 QAM; in-the-clear, unencrypted

## **Channel coverage**

VHF	2 through 13
UHF	14 through 69
Cable TV	Mid band (A-8 through A-1, A through I)
	Super band (J through W)
	Hyper band (AA through ZZ, AAA, BBB)
	Ultra band (65 through 94, 100 through 135)

#### **Power source**

120V AC, 60 Hz

#### **Power maximum current**

32L1460UC	0.9 A
40L1460UC	1.1 A
50L1460UC	1.4A

#### **Power consumption**

32L1460UC	0.3 W in Standby mode
40L1460UC	0.3 W in Standby mode
50L1460UC	0.3 W in Standby mode

#### **Audio power**

32L1460UC	6Ω 7W
40L1460UC	6Ω 7W
50L1460UC	6Ω 7W

## **Speaker type**

32L1460UC	Two 5.98 x 1.57 x 1.42"
40L1460UC	Two 5.98 x 1.57 x 1.42"
50L1460UC	Two 5.98 x 1.57 x 1.42"

## Video/audio terminals

#### Video/audio input

Video	1 V (p-p), 75 ohm, negative sync.
Audio	200 mV(rms) (-20dBFS, 47K ohm or greater)

## ColorStream™ (component video) HD input

Video	Y: 1V(p-p), 75 ohm
	PR: 0.7 V(p-p), 75 ohm
	PB: 0.7 V(p-p), 75 ohm
	Suggested formats: 1080i, 720p, 480p, 480i
Audio	200 mV(rms) (-20dBFS, 47K ohm or greater)

#### HDMI<sup>®</sup> input

HDMI <sup>®</sup> compliant (type A connector)		
HDCP compliant		
	2-channel Linear-PCM/ Dolby <sup>®</sup> Digital; 32/44.1/48kHz sampling frequency; 16/20/24 bits per sample	

## **Dimensions (with stand)**

32L1460UC	Width	28.9" (734mm)
	Height	19.3" (489mm)
	Depth	7.1"(180mm)
40L1460UC	Width	36.5" (928mm)
	Height	23.1"(588mm)
	Depth	7.6" (194mm)
50L1460UC	Width	44.2" (1122mm)
	Height	27.6" (702mm)
	Depth	8.5" (217mm)

## Weight (mass)

32L1460UC	12.8 lbs (5.8 kg)
40L1460UC	20.9 lbs (9.5 kg)
50L1460UC	35.1 lbs (15.9 kg)

## **Operating conditions**

Temperature	32°F - 95°F (0°C - 35°C)
Humidity	20 - 80 % (no moisture condensation)

### **Supplied accessories**

- Remote control with two size "AAA" batteries
- Resource Guide
- Quick Start Guide
- Pedestal and hardware
- Power cord (For 40L1460UC and 50L1460UC models)

## **NOTE** The Terms and Conditions of the Limited One (1) Year Warranty on parts and Labour can be found at: For Canada, **support.toshiba.ca**. Click on Televisions,Select Warranty, then Select Standard Warranty & Service Plans and Select Flat Panel Television (bilingual)

## Acceptable signal formats for HDMI®

#### HDMI® signal formats

Format	Resolution	V. Frequency	H. Frequency	Pixel Clock Frequency
VGA	640 x 480	59.940 Hz	31.469 kHz	25.175 MHz
SVGA	800 x 600	60.317 Hz	37.879 kHz	40.000 MHz
XGA	1024 x 768	60.004 Hz	48.363 kHz	65.000 MHz
WXGA	1280 x 768	59.870 Hz	47.776 kHz	79.500 MHz
	1360 x 768	60.015 Hz	47.712 kHz	85.500 MHz
SXGA	1280 x 1024	60.020 Hz	63.981 kHz	108.000 MHz
480i	720 x 480i	59.940 Hz	15.734 kHz	27.000 MHz
480p	720 x 480p	59.940 Hz	31.469 kHz	27.000 MHz
720p	1280 x 720p	60.000 Hz	45.000 kHz	74.250 MHz
1080i	1920 x 1080i	60.000 Hz	33.750 kHz	74.250 MHz
1080p	1920×1080p	24.000 Hz	27.000 kHz	74.250 MHz
		60.000 Hz	67.500 kHz	148.500 MHz

NOTE	Some illustrations in this User's Guide are for explanation purposes and may differ from the actual unit.
	Designs and specifications are subject to change without notice.
	These models may not be compatible with features and/or specifications that may be added in the future.

## **Appendix B**

## Index

## A

Acceptable signal formats for HDMI® HDMI® signal formats 103 Additional Safety Precautions Installation, Care, and Service Choosing a location for your I FD TV To Display your LED TV on the included Pedestal Stand 4 Adjusting the picture Selecting the picture mode Adjusting the picture quality Using closed captions 65, 66 ANT/CABLE IN Storing channels in memory (optional) Auto Tunina Manual Tuning 44 Audio Adjusting quality 71 Dolby® Digital Dynamic Range Control 72 Muting sound 69 Stereo/SAP broadcasts 70

Auto Aspect using 63 Auto Start function Media Player 77 Available remote control key functions HDMI® CEC Player Control menu functions HDMI® CEC input source selection VOLUME and MUTE controls of Audio Receiver 84

### B

Base closed captions Digital CC settings Adjusting the audio Muting the sound 67

### C

Channel Browser Elements 55 Tuning channels 53 Channels Locking channels 74 Cinema Mode Noise Reduction MPFG NR DNR 92 Color Temperature Static Gamma DvnaLightTM Dynamic Contrast 91 Component video cables (red/green/blue) HDMI® cable (with HDMI Logo) Optical audio cable About the connection illustrations 24 Connecting a digital audio system Connecting a computer Connection to the TV's HDMI® terminal 25.32 Connecting a VCR, antenna, cable TV, or camcorder Connecting a Blu-ray<sup>™</sup> / DVD player, satellite receiver with ColorStream® or VCR Connecting an HDMI® or DVI device to the HDMI® input HDMI® CEC connection 25 Connecting Your TV Overview of cable types Coaxial (F-type) cable Standard A/V cables (red/white/ yellow) 23

## D

Dimensions (with stand) Weight (mass) Operating conditions Supplied accessories 102

### E

Edge Enhancer 93 Enter a new PIN code Forgotten PIN code Changing or deleting your PIN code Using parental controls (for USA region) 73

## F

Favorites browser Elements of the Channel Browser Adding and clearing channels and inputs in the History List Tuning to the next programmed channel 54 Features 17, 18 Freeze Feature 64 Full TheaterWide 1 TheaterWide 2 TheaterWide 3 60, 64, 87,

## H

HDMI®-CEC using 84 HDMI® Information Display Displaying TV status information Understanding the last mode memory feature 87

Introduction Safety icons Features Overview of installation, setup, and use 16

#### L

Last mode memory feature 89 Locks menu

## 108 <sup>Index</sup>

setting pin code 73

#### M

Media Player playing music files 80 Menu Navigation 42 Menu Layout and Navigation Main menu layout Navigating the menu system 40

#### N

Native 4:3 Normal Dot by Dot 59, 61 No HDMI® CEC operation HDMI® problems Media Player problems If the problem persists after trying the solutions 98 No signal power down set 83

#### 0

Other HDMI® CEC functions Setting up HDMI® CEC Using the HDMI® settings feature HDMI® 1(or 2) RGB Range 86

#### P

Panel lock feature using 75 Picture Adjusting quality 66 Picture size 4:3 62 Normal 62 TheaterWide 1 60 TheaterWide 2 60 TheaterWide 3 61 Pin code Changing 73 Deleting 73 Entering PIN code 73 Forgotten 73 Power maximum current Power consumption Audio power Speaker type 101

## Q

Quick setup ANT/CABLE IN 44

#### R

Remote control problems Channel tuning problems Closed caption problems Rating blocking (V-Chip) problems 97 Resetting Factory Defaults 49

### S

Safety Icons 16 Safety Precautions WARNING CHILD SAFETY Important Safety Instructions 2, 4 Scrolling the TheaterWideTM picture (TheaterWide 2 and 3 only) Using the Auto Aspect feature Using the 4:3 Stretch

Using the FREEZE feature 59, 61, 63 Setting channel skip Setting the AV input mode Setting the time zone Viewing the system status 47 Setting the sleep timer No Signal Power Down Using HDMI® CEC HDMI® CEC playback device (BlurayTM/DVD player, etc.) control 83 Setting up your TV Initial Setup Installation setup selection Menu language 43 Slide show Playing music files Viewing photo files and plaving music files at the same time Sorting photo or music files 78, 80 Sound Mode Stable Sound Using the Dolby® Digital Dynamic Range Control feature Selecting the PIN code 72 Specifications HDMI® input 102 Speaker type 101 Supplied accessories 103 TV system 100 Specifications Television system Channel coverage Power source 100

## T

Timer Sleep timer 83 Time zone

settina 48 To Display your LED TV using a Wall Bracket FCC Declaration of Conformity Compliance Statement (Part 15) ENERGY STAR® User Information Important notes about your TV 6 To open the Media Player Viewing photo files Multi View Single view 77 Trademark Information Copyright Notice 9 Troubleshooting Closed caption problems 98 Contact Toshiba 99 HDMI® 98 Media player problems 99 Picture problems 95 Sound problems 97 Troubleshooting General troubleshooting Picture problems Sound problems 94, 95 Tuning to a specific channel (programmed or unprogrammed) Switching between two channels using Channel Return Switching between two channels using SurfLock™ Selecting the picture size 57 TV front and side panel controls and connections TV back panel connections 19 TV panel controls left side 20 TV remote functionality 37

## 110 Index

#### U

Using the Digital Audio Selection Selecting stereo/SAP broadcasts Adjusting the audio guality DTS TruSurround<sup>™</sup> 70 Using the panel lock feature Using the Media Player Using Media Player with a USB device Auto Start function 75 Using the Remote Control Installing batteries Remote control effective range Learning about the remote control 34 Using the TV's Advanced Features Using the advanced picture settings ColorMaster™ Base Color Adjustment 90

#### V

Video/audio terminals Video/audio input ColorStream® (component video) HD input HDMI®input 101 Video input sources labeling 52